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Indice

1. Introducción

La conducta suicida es un problema multidimensional complejo que resulta de una interacción difícil y dinámica de factores biológicos, genéticos, psicológicos, económicos, sociodemográficos y culturales (Andrés & Halicioglu, 2010; Borges, Orozco, Benjet, & Medina-Mora, 2010; Nock, Hwang, Sampson, & Kessler, 2010). Además incluye un espectro que considera la ideación suicida, planes suicidas, intentos suicidas y el suicidio consumado. La prevalencia vida de la ideación suicida varía según el país entre el 2.1% y el 14.1%, mientras la prevalencia de vida de intentos de suicidio fluctúa entre el 1.4% y el 9.8%; en cuanto a la tasa de suicidio anual de los países de la Organización Mundial de la Salud (OMS) varía del 0.4 al 33.3 por cada 100 mil habitantes (Organisation for Economic Co-operation and Development, 2013; World Health Organization, 2012).

El análisis de las conductas suicidas y específicamente del suicidio, ha ido adquiriendo en los últimos años una mayor atención dado el impacto psicológico, social y económico asociado a su desarrollo y manifestación, transformándose en uno de los problemas más importantes de salud pública en el mundo. Su incidencia ha aumentando de manera considerable en los últimos años específicamente en el rango de edad entre 15-44 años constituido por personas en la etapa de mayor productividad económica (Chang, Gunnell, Sterne, Lu, & Cheng, 2009; Gunnell & Middleton, 2003; Patton et al., 2009; Thomas & Gunnell, 2010; WHO, 2004) siendo la tercera causa de muerte en el mundo en este rango de edad y la segunda para el grupo entre 15-19 años (WHO, 2012). En Europa es la principal causa de muerte prematura especialmente en adultos jóvenes (WHO, 2003; 2004).

Un millón de personas muere cada año como consecuencia de una conducta autolítica, una muerte cada 40 segundos (WHO, 2003). Se estima que para el año 2020 aproximadamente 1.53 millones de personas morirán por suicidio y se producirán entre 10 y 20 veces más intentos suicidas. Esto significará una muerte cada 20 segundos y un intento suicida cada 1 a 2 segundos (Bertolote & Fleishmann, 2002). Asimismo, los intentos suicidas y específicamente la repetición de esta conducta puede ser 40 veces más frecuente que el suicidio consumado (Schmidtke et al., 1996). Esto significa que aunque un intento suicida no termine en muerte se asocia a un incremento de la probabilidad de repetición del intento y de consumación del suicidio (Neeleman, de Graaf, & Vollebergh, 2004; Schmidtke et al., 1996). Según algunos autores más del 2% de quienes intentan suicidarse mueren durante el siguiente año y sobre el 7% lo hacen en los 10 años siguientes (Beautrais, 2003; Owens, Horrocks, & House, 2002).

Existe consenso científico respecto a la gravedad que ha alcanzado y el impacto generado por esta problemática en la salud pública mundial. Aunque la información analizada proveniente de diversas investigaciones realizadas en los últimos años ha permitido identificar y analizar algunos de los factores y dimensiones involucradas en el desarrollo de las conductas suicidas, se mantiene la necesidad de continuar desarrollando estudios que permitan alcanzar una mayor especifidad en cuanto a la influencia de determinados factores biológicos, sociodemográficos, culturales y sociales, así como de aspectos metodológicos en el diseño de las investigaciones que contribuyan a mejorar la comprensión de las conductas suicidas. Es por ello que el presente estudio busca analizar e identificar factores asociados a poblaciones específicas de riesgo como también aspectos metodológicos que optimicen su abordaje y con ello proponer nuevos elementos teóricos y prácticos a la discusión existente que permitan focalizar los análisis y optimizar las estrategias de intervención en grupos de riesgo.

2. Aspectos Demográficos

2.1 Aspectos de género de la conducta suicida

Estudios epidemiológicos realizados en distintas culturas y países muestran diferencias de género en el desarrollo y ejecución de las conductas suicidas. Las mujeres realizan más intentos suicidas (Aghanwa, 2004); sin embargo, los hombres presentan una mayor tasa de suicidio consumado (Beautrais, 2003). En países desarrollados, los suicidios son 2 a 4 veces más frecuentes entre hombres (Denney, Rogers, Krueger, & Wadsworth, 2009; Värnik et al., 2009) mientras que los intentos suicidas son 2 a 3 veces más frecuente entre mujeres (Canetto & Sakinofsky, 1998; Nock et al., 2008). De hecho, la tasa de suicidios se incrementa con la edad en ambos grupos mientras que al mismo tiempo los intentos decrecen (Carroll-Ghosh, Victor, & Bourgeois, 2003; Sudak, 2005). Esta distribución diferencial de la conducta suicida entre hombres y mujeres es conocida como la “paradoja del género”. Aunque en general la evidencia empírica apoya esta paradoja algunos investigadores han identificado cambios en la distribución de las conductas suicidas entre hombres y mujeres. Por ejemplo, Gunnell et al. (2003) muestran que aunque la tasa de suicido en Inglaterra y Gales es todavía mayor en hombres que en mujeres, la brecha de género ha disminuido en los últimos años (1950-1998). Además, la tasa de suicidio de mujeres en algunos países desarrollados se ha incrementado con el tiempo (Burrows, Auger, Roy, & Alix, 2010). Por ejemplo, la tasa de suicido de mujeres en Corea del Sur ha pasado de 1.1 por cada 100 mil habitantes el año 1986 a 4.2 por cada 100 mil habitantes el año 2005 (Kwon, Chun, & Cho, 2009). En la China rural, las mujeres presentan una tasa de suicidio igual o mayor a los hombres (Phillips & Cheng, 2012; Soman, Safraj, Kutty, Vijayakumar, & Ajayan, 2009; Sudhir Kumar, Mohan, Ranjith, & Chandrasekaran, 2006). En India y Kuwait, las tasas de suicidio son también similares entre hombres y mujeres (Aghanwa, 2004). Estas variaciones en la “paradoja del género” en países no occidentales, pueden ser explicadas no sólo por las diferencias culturales existentes, sino además por una mayor letalidad en los métodos usados por las mujeres como por ejemplo la práctica de quemarse a lo bonzo en la India y el uso de pesticidas en China (Kumar, 2003; Yip & Liu, 2006). Por otra parte, en EEUU las diferencias de género se mantuvieron estables, alrededor de 2.5:1 (2.5 veces más frecuente en hombres que en mujeres), desde 1930 a 1971, sin embargo en la última década aumentó a 4:1 (American Foundation for Suicide Prevention [AFSP], 2010) cumpliéndose nuevamente esta paradoja.

Las explicaciones propuestas para la “paradoja del género” se basan en la influencia de las características socioculturales en el desarrollo de conductas suicidas. De este modo,

los hombres presentan mayores niveles de agresión, más trastornos por uso de sustancias y utilizan métodos más violentos. Al respecto las mujeres utilizan frecuentemente como método el envenenamiento, cortes de muñecas o lanzamientos desde alturas (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999; Hawton et al., 2003; Värnik et al., 2009). Además, los hombres buscan menos apoyo social y ayuda específica para sus problemas que las mujeres (Gonda et al., 2012) y se ven más afectados por factores externos y demandas sociales (McPhedran & Baker, 2008; Thomas & Gunnell, 2010). Considerando la prevalencia de los trastornos afectivos, los trastornos bipolares son más frecuentes en hombres y los trastornos depresivos mayores en mujeres, evidencia que sigue apoyando las diferencias de género en la aparición de conductas suicidas (Zalsman et al., 2006). De hecho, los hombres bipolares tienen mayor riesgo de completar el suicidio pero cometen menos intentos suicidas que las mujeres (Simon, Hunkeler, Fireman, Lee, & Savarino, 2007).

3. Suicidios a lo largo del ciclo vital

El suicidio infantil es poco frecuente; sin embargo, el número de suicidios entre niños y adolescentes hasta los 14 años parece estar aumentando en varios países. La tasa varía de 0 a 3.1 por cada 100 mil habitantes con una tasa global estimada de 0.6 por cada 100 mil habitantes y una proporción de 2 niños por cada niña (Dervic, Brent, & Oquendo, 2008). Estas tasas se incrementan más tarde con la adolescencia debido a una mayor planificación y letalidad de los intentos suicidas, asociado a una mayor prevalencia de trastornos mentales y abuso de sustancias (Brent et al., 1999; Groholt, Ekeberg, Wichstrom, & Haldorssen, 1998).

El suicidio es la tercera causa de muerte para el grupo de edad entre 10-14 años y 15-24 años, como también la segunda causa de muerte para personas entre 25-34 años en EEUU (Karch, Logan, McDaniel, Parks, & Patel, 2012). En Europa, es la segunda causa de muerte después de muertes accidentales (Blum & Nelson-Mmari, 2004). Bridge et al. (2010) confirmaron que los trastornos afectivos son el principal factor de riesgo en adolescentes, hombres y mujeres. Por otra parte, en el grupo entre 8-13 años el riesgo de suicidio en mujeres aumenta durante la pubertad asociada con el inicio más frecuente de episodios depresivos (Essau, Lewinsohn, Seeley, & Sasagawa, 2010; Essau, Conradt, Petermann, 2000) sumado a un abrupto incremento en el riesgo de ideación, planes e intentos suicidas en mujeres desde los 13 años (Eaton et al., 2006; Grunbaum et al., 2004). Saunders y Hawton (2006) señalan que la iniciación de la menstruación es el momento en el que las diferencias de género en las tasas de trastornos afectivos y conductas suicidas comienzan a presentarse. La tasa más alta de intentos suicidas aparece en la adolescencia temprana en las mujeres con una diferencia de cerca de tres años respecto a los hombres (Levinson, Haklai, Stein, & Ethel-Sherry, 2006). Las adolescentes mujeres que logran consumar el suicidio se caracterizan por el uso de métodos más violentos, tales como uso de armas de fuego o ahorcamiento (Groholt et al., 1998). Este incremento en la letalidad puede significar una reducción en las diferencias de género en las tasas de suicidio (Beautrais, 2003) como se ha observado en el grupo de 19 años donde las tasas son similares (Lewinsohn, Rohde, Seeley, & Baldwin, 2001). Sin embargo, un estudio con víctimas de suicidio entre 10-24 años encontró que el 81% correspondió a hombres y el 19% a mujeres (Karch et al., 2012).

El suicidio es la segunda causa de muerte en personas entre 25 y 34 años en EEUU y Europa. La tasa de suicidio fue 2.4 veces mayor entre jóvenes adultos respecto a adolescentes en un estudio con varios países occidentales (Patton et al., 2009). Las tasas de suicidio aumentan de manera continua desde la adolescencia hasta alcanzar un máximo cerca de los 45-59 años (Mendez-Bustos, Lopez-Castroman, Baca-García, & Ceverino, 2013). Esta

población representa a la población económicamente activa, particularmente expuesta a presiones laborales y demandas del entorno. De acuerdo al modelo Estrés Diátesis, la incorporación de mujeres al mercado laboral puede haber generado un aumento en este grupo del riesgo suicida (Koo & Cox, 2008; Mann, 2003; Page, Morrell, & Taylor, 2002).

Un estudio realizado en EEUU entre 1999-2010 encontró que la tasa de suicidio más alta se alcanza entre los 45-59 años de edad disminuyendo en personas de la tercera edad (National Center for Injury Prevention and Control [CDC], 2012). Mientras la tasa de intentos de suicidio disminuye con la edad independientemente del género (De Leo et al., 2001) las tasas de suicidio consumado aumentan con la edad. Este incremento es significativo en hombres (Klein, Christoph Bischoff, & Schweitzerb, 2010) alcanzando tasas 6-12 veces mayores que en mujeres en países de occidente (Karch, 2011). Esta importante diferencia ha sido atribuida a una mejor planificación, menos advertencias de sus intentos suicidas y el uso de métodos más letales en hombres, tales como el uso de armas de fuego y ahorcamiento o sofocación (Carney, Rich, Burke, & Fowler, 1994; Wanta, Schlotthauer, Guse, & al., 2009).

En Europa oriental y Sudamérica, por otra parte, la tasa de suicidio entre hombres y mujeres no cambia sobre los 65 años (Shah, 2007) y en EEUU incluso disminuye (Nock et al., 2008). Las estadísticas de suicidio en EEUU indican que el mayor riesgo de suicidio en hombres aparece en personas de 85 años y más, mientras el mayor riesgo de suicido en mujeres se da entre los 60 y 64 años. Al parecer, mientras la tasa de suicidio en hombres se incrementa con la edad, el riesgo de suicido en mujeres se mantiene (Mendez-Bustos et al., 2013).

4. Aspectos Sociales y Económicos

Durkheim (1951) sugirió que las conductas suicidas son un reflejo de las características de los cambios sociales y de la sociedad en la cual ocurren. Entonces, este tipo de conductas debería ser más común en áreas con mayor fragmentación social, deprivación socioeconómica y devaluación del capital humano. Factores tales como el desempleo, reducción de los ingresos, divorcio, género, grupo etario y pertenecer a un grupo social específico han sido asociados con el suicidio (Yamamura, 2010; Zivin, Paczkowski, & Galea, 2011). Por otra parte, hay un mayor riesgo de conducta suicida cuando las personas pierden y/o se desvinculan de su grupo social de apoyo (Chen, Yip, Lee, Fan, & Fu, 2010; Denney et al., 2009).

El proceso de globalización y las transformaciones económicas subyacentes han influido en las dimensiones psicológica y social de las personas. Stiglitz (2002) declaró que el propósito del desarrollo económico es mejorar el bienestar de las personas. Este mejoramiento se ve reflejado en indicadores tales como el Producto Interno Bruto, el Índice de Precios del Consumidor, el Índice de Desarrollo Humano, la tasa de desempleo y la tasa de suicidio entre otros. Diferentes autores han presentado evidencia de una relación procíclica entre economía y mortalidad por suicidio (Kuroki, 2010; Tapia Granados & Ionides, 2011). Sin embargo, también se ha encontrado evidencia de una relación entre suicidio y crisis económica de carácter contracíclico aumentando durante las recesiones (Chang et al., 2009; Rahman, Mittelhammer, & Wandschneider, 2011). Para otros autores, la evidencia del efecto de las crisis económicas sobre la tasa de suicidio sigue siendo poco clara (Ayuso-Mateos, Barros, & Gusmão, 2013; Miret et al., 2014).

La crisis económica que actualmente afecta a diversos países en el mundo y es considerada la mayor desde los años treinta según la Organización Mundial de la Salud (2009) se ha transformado en fuente de estrés psicológico (Burrows et al., 2010; Catalano et al., 2011; Ferretti & Coluccia, 2009). Por ejemplo, la prevalencia de Trastorno Depresivo Mayor en Grecia aumentó de 3.3 el año 2008 a 8.2 el 2011 (Economou, Madianos, Peppou, Patelakis, & Stefanis, 2013; Economou, Madianos, Theleritis, Peppou, & Stefanis, 2011). En un contexto de crisis económica se produce un deterioro de las condiciones de trabajo, aumento de la carga de trabajo, reducción de los ingresos y un aumento del desempleo. Estos factores están directamente correlacionados con la demanda por atención en los servicios de salud mental, la tasa de admisión en unidades psiquiátricas y el número de diagnósticos psiquiátricos realizados (Borowy, 2008; Gilchrist, Howarth, & Sullivan, 2007). Desde el punto de vista clínico, algunos autores han encontrado una asociación entre pérdida de trabajo

e indicadores de salud mental tales como mayor estrés psicológico, depresión, ansiedad y síntomas psicosomáticos (Mandal, 2008; Stuckler, Basu, Suhrcke, Coutts, & McKee, 2009), mayor frecuencia de episodios depresivos mayores (Lee et al., 2010), abuso de alcohol (Inoue et al., 2010; Khan, Murray, & Barnes, 2002) y conductas suicidas (Gunnell, Platt, & Hawton, 2009; Stuckler et al., 2009). En conclusión, existe evidencia acerca de las consecuencias generadas por una crisis económica, especialmente respecto a los efectos negativos sobre la salud mental (Stuckler et al., 2009). Así, la tasa de suicidios es considerado un indicador objetivo y fiable del estado de bienestar emocional y de la calidad de vida de la población (Andrés & Halicioglu, 2011; Rahman et al., 2011). Es por ello que el riesgo aumentado de presentar un trastorno mental en tiempos de crisis económica y su relación con el desarrollo de conductas suicidas apoya la necesidad de fortalecer el gasto en atención de salud primaria y la elaboración de programas de prevención en salud mental.

5. Aspectos Clínicos

Los trastornos afectivos, el abuso de sustancias, los trastornos de ansiedad, los trastornos de personalidad y los trastornos psicóticos han sido considerados factores de riesgo para el desarrollo de conductas suicidas (Bolton et al., 2008). Los trastornos psiquiátricos incrementan el riesgo de conductas suicidas. La evidencia empírica muestra que sobre el 90% de las víctimas de suicidio presentaban uno o más trastornos psiquiátricos, representando el 47-74% de la población en riesgo de suicidio (Cavanagh, Carson, Sharpe, & Lawrie, 2003; Hawton et al., 2003; Mościcki, 1997). El alto impacto de los trastornos mentales está relacionado con su alta prevalencia, inicio temprano y su tendencia a la cronicidad, alterando y dificultando la adaptación de las personas a su entorno (Harris & Barraclough, 1998).

5.1 Trastornos Afectivos

La asociación entre trastornos psiquiátricos y conductas suicidas es particularmente frecuente en trastornos afectivos, estando estrechamente vinculados. Resultados de investigaciones han demostrado una mayor letalidad de las conductas suicidas en pacientes con trastornos del ánimo y una elevada tasa de mortalidad por suicidio (Angst, Stassen, Clayton, & Angst, 2002; Baldessarini et al., 2006). Algunos estudios han estimado que entre el 15% al 19% de las muertes en personas diagnosticadas con trastornos afectivos se produjeron por suicidio (Goodwin & Jamison, 1999; Guze & Robins, 1970).

En cuanto a los trastornos afectivos y específicamente, el trastorno depresivo mayor y el trastorno bipolar, son las enfermedades psiquiátricas más vinculadas con el suicidio en términos absolutos, siendo responsables de aproximadamente el 60% de todos los suicidios (Beautrais et al., 1996; Bertolote, Fleischmann, De Leo, & Wasserman, 2003). En términos relativos, el trastorno bipolar podría ser también la enfermedad mental más asociada al suicidio dado que presentan una alta prevalencia de conductas suicidas y una mayor letalidad comparado con cualquier otro trastorno psiquiátrico (Tondo, Lepri, & Baldessarini, 2007).

El riesgo de conductas suicidas en trastornos afectivos está principalmente asociado a episodios depresivo mayor o manía disfórica (Rihmer, 2007). En pacientes con trastornos del ánimo, las conductas autolesivas e intentos suicidas, están asociados con el riesgo de un eventual suicidio (Coryell & Young, 2005; Oquendo et al., 2004). La secuencia de tiempo y el desarrollo de conductas suicidas, desde la ideación suicida o comportamiento suicida al suicidio consumado depende del tipo de trastorno diagnosticado. Algunos investigadores

han sugerido que los trastornos de personalidad, los trastornos psicóticos y los trastornos depresivos aceleran esta secuencia (Angst et al., 2005). Aunque la depresión parece incrementar el deseo de muerte, la impulsividad y un deficiente control conductual asociado a un trastorno bipolar puede aumentar la probabilidad de aparición de actos suicidas (Nock et al., 2010). Asimismo, sobre el 15% de los pacientes hospitalizados por este tipo de patología eventualmente comenten suicidio (Maris, 2002).

Los trastornos afectivos reducen de manera significativa la calidad de vida de las personas. Un estudio comparó individuos con depresión y enfermedades físicas encontrando en los primeros un mayor deterioro de su calidad de vida (Alonso, Angermeyer, & Lépine, 2004; Maris, 2002). Además, Tondo et al. (2007) estudiaron 2826 pacientes italianos diagnosticados con un trastorno afectivo mayor e identificaron una tasa de suicidio 8.2 veces mayor en estas personas comparadas con la población general. Otro estudio en EEUU, encontró que la mayoría de las personas de 60 años o más que cometieron suicidio presentaban un diagnóstico de depresión o trastorno bipolar (Karch, 2011).

5.2 Trastorno Depresivo Mayor

La depresión afecta a una de cada cinco personas durante la vida, es la cuarta causa de carga de enfermedad y representa el 4.5% de la carga de enfermedad total en el mundo (Sullivan, Kessler, & Kendler, 1998; WHO, 2007). Además, ha sido considerada la principal causa de discapacidad en el mundo debido a su curso crónico y recurrente siendo asociada con daño físico, deterioro de las habilidades sociales y muerte no natural (Harris & Barraclough, 1998). La prevalencia de vida para trastorno depresivo mayor es de 16.2% con una mayor prevalencia acumulada en el rango de edad entre 18-59 años. Factores sociodemográficos tales como desempleo, discapacidad, bajos ingresos, separación o vivir en un entorno de pobreza está asociado con ánimo depresivo (Kessler et al., 2003). La depresión supone el 10.7% del total de años vividos con discapacidad (Üstün, Ayuso-Mateos, Chatterji, Mathers, & Murray, 2004).

La depresión es uno de los más importantes factores de riesgo asociados al intento suicida (Bernal et al., 2007). Además el riesgo de muerte por suicidio es marcadamente mayor en personas depresivas respecto a la población general. Más del 50% de las personas que mueren por suicidio reúnen los criterios para un trastorno depresivo (Cavanagh et al., 2003; Harris & Barraclough, 1998; WHO, 2003).

El análisis realizado por National Comorbidity Survey Replication [NCS-R] demostró que el 72.1% de las personas que han experimentado un trastorno depresivo mayor durante su vida reúnen criterios para otro trastorno mental, estando la comorbilidad psiquiátrica asociada a un incremento en la severidad de los intentos suicidas (Kessler et al., 2003; Nock et al., 2010). Por ejemplo, pacientes con un episodio depresivo mayor y personalidad ciclotímica tienen mayor probabilidad de presentar ideación suicida e intentos suicidas durante su vida (Akiskal & Benazzi, 2005; Kochman et al., 2005). Además, en pacientes con depresión severa y trastorno de ansiedad el riesgo de suicidio se incrementa (Hawgood & De Leo, 2008). Por otra parte, depresión y trastorno por abuso de alcohol son los más importantes factores de riesgo de suicidio en Europa y América del Norte (Oquendo et al., 2005; WHO, 2003).

Asimismo, factores de riesgo clínicos y psicosociales tales como historia de intentos suicidas previos, altos niveles de desesperanza, culpa e impulsividad, enfermedades físicas crónicas, historia de infancia con abuso físico o sexual y baja autoestima incrementan la probabilidad de suicidio en pacientes con episodio depresivo mayor (Angst, Angst, Gerber-Werder, & Gamma, 2005; Coryell & Young, 2005; Oquendo et al., 2004).

5.3 Trastorno Bipolar

El trastorno bipolar ha sido asociado con un alto riesgo de suicidio (Hawton et al., 2005; Hirschfeld et al., 2002; Tondo, Isacsson, & Baldessarini, 2003). Un estudio que analizó el espectro bipolar en población estadounidense encontró una prevalencia de vida estimada de 1.0% para trastorno bipolar tipo I (episodios depresivo y maniaco), 1.1% para trastorno bipolar tipo II (episodios depresivo e hipomaniaco) y un 4.4% para cualquier trastorno bipolar. En otro estudio que consideró 11 países de América, Europa y Asia la prevalencia encontrada para bipolaridad tipo I y tipo II fue de 0.6% y 0.4% respectivamente y un 2.4% para cualquier trastorno del espectro bipolar (Merikangas et al., 2007; Merikangas et al., 2011).

La consecuencia más seria de un trastorno bipolar son los intentos suicidas, los cuales ocurren en cerca del 55% de los pacientes. Los pacientes con esta patología psiquiátrica presentan el mayor riesgo de realizar actos suicidas durante la vida y la más alta letalidad comparado con cualquier otro trastorno psiquiátrico (Allen et al., 2005; Tondo et al., 2007). Además, se identificó una mayor prevalencia de conductas suicidas en sujetos con un trastorno bipolar que entre sujetos con un trastorno depresivo mayor con cuidados ambulatorios (Tondo et al., 2007). Aproximadamente entre el 10% y el 18% de los pacientes con trastorno bipolar mueren por suicidio (Angst, Clayton, & Angst, 2002; Goodwin & Jamison, 2007; Harris &

Barraclough, 1997). La conducta suicida ocurre frecuentemente en el inicio temprano de la enfermedad y puede ser más común en trastorno bipolar tipo II que en trastorno bipolar tipo I. Además, los pacientes con trastorno bipolar tipo II tienen mayor riesgo de suicidio que todos los subtipos de trastornos mayores del ánimo (Brown, Beck, Steer, & Grisham, 2000; Rihmer, 2005; Rihmer & Kiss, 2002). Como ocurre con el trastorno depresivo mayor, la comorbilidad es también un factor que incrementa el riesgo de intento y suicidio consumado entre pacientes bipolares (Hawton et al., 2005).

En el campo de la práctica clínica y prevención, la evidencia confirma la fuerte asociación entre trastorno bipolar, intento de suicidio y suicidio consumado, siendo la conducta suicida en estos tipos de pacientes mucho más letal que en la población general (Carta & Angst, 2005; Isometsä, 2005; Simon et al., 2007). Un suicidio se consuma por cada 30 intentos en la población general estadounidense mientras la tasa se incrementa a un suicidio por cada 2-3 intentos en pacientes con un trastorno bipolar (Simon et al., 2007). Estudios previos han encontrado que la tasa de suicidio en pacientes bipolares es 24 a 30 veces mayor que en la población general (Guze & Robins, 1970; Sharma & Markar, 1994).

Otro aspecto a considerar es la influencia de diferentes episodios de ánimo sobre el riesgo suicida en pacientes con un trastorno bipolar. Un estudio que analizó autopsias psicológicas en un grupo de 31 pacientes con este diagnóstico encontró que el 79% de los suicidios ocurrió durante la fase depresiva y un 11% durante episodios mixtos y maniacos (Isometsa, Henriksson, Aro, & Lonnqvist, 1994). Otros autores han encontrado que los pacientes bipolares tienen una mayor probabilidad de realizar conductas suicidas durante episodios depresivos mixtos o puros (Righini et al., 2005; Valtonen et al., 2008). En general las últimas investigaciones indican que durante episodios depresivos severos, puros o mixtos entre el 78-89% de las personas con trastorno bipolar desarrollan conductas suicidas principalmente ideación e intentos suicidas aumentando el riesgo de muerte por suicidio, sobre todo, durante el primer año tras el diagnóstico (Pompili et al., 2009; Rihmer, 2007; Valtonen et al., 2007).

Por otra parte, Dunner y Fieve (1974) propusieron el concepto de “ciclos rápidos” definidos como la presencia de cuatro o más episodios maniacos o depresivos por año en pacientes bipolares. Entre el 13% y 56% de las personas diagnosticadas con trastorno bipolar presentan ciclos rápidos (Gao et al., 2009; Schneck et al., 2004). Además este tipo de pacientes tienen mayor riesgo de intento suicida (Garcia-Amador, Colom, Valenti, Horga, & Vieta, 2009) siendo más frecuentes y letales que aquellos sin ciclos rápidos (Coryell et al., 2003; Hawton et al., 2005).

Los pacientes bipolares con un inicio temprano de su enfermedad, una historia de intentos suicidas previos, historia familiar de suicidios o intentos suicidas previos, altos niveles de desesperanza, hospitalizaciones psiquiátricas anteriores, abuso sexual en la infancia, trastorno de personalidad cluster B, abuso de alcohol y otra comorbilidad psiquiátrica tienen un mayor de riesgo de intento suicida y suicidio consumado (Angst et al., 2002; Harris & Barraclough, 1997; Rihmer, 2007). La comorbilidad psiquiátrica es extremadamente frecuente en estos pacientes incrementando el riesgo de muerte.

Algunos estudios encontraron que entre el 65% y el 71% de pacientes bipolares presentan por lo menos una comorbilidad psiquiátrica, 42% dos o más y un 24% tres o más (Isometsä, 2005; McElroy et al., 2001). Altas tasas de comorbilidad psiquiátrica en eje I y eje II incrementan el riesgo de suicidio en pacientes con trastorno bipolar (Leverich et al., 2003). Los resultados identificados permiten diferenciar entre pacientes bipolares con y sin trastornos comórbidos. Estos últimos presentan mayores puntuaciones en desesperanza, impulsividad o agresión y menor puntaje en autoestima y habilidades de resolución de conflictos (Hawton et al., 2003).

6. Repetidores Suicidas

6.1 Intentos suicidas

Cuando se comparan intentos suicidas con suicidios consumados las cifras aparecen muy alarmantes. Los intentos suicidas pueden ser hasta 40 veces más frecuentes que los suicidios (Schmidtke et al., 1996) y se calcula que entre 9 a 36 millones de personas intentan suicidarse cada año en el mundo (Bertolote, Fleischmann, Butchart, & Besbelli, 2006). Además, las personas que realizan este tipo de conductas aumentan de manera significativa la probabilidad de repetición y consumación del suicidio. Estudios previos han demostrado que más del 2% de quienes intentan suicidarse morirán por esta causa durante el siguiente año y el 7% en los 10 años siguientes (Beautrais, 2003; Owens et al., 2002).

Resultados de la NCS-R en población adulta estadounidense mostraron un OR para intento suicida durante la vida de 5.0 en individuos con un trastorno del ánimo siendo los trastornos bipolares la patología con el mayor OR (6.7) para intento suicida (Nock et al., 2010)

6.2 Repetidores Suicidas

Individuos que han intentado suicidarse aumentan el riesgo de repetir la conducta suicida (Hultén et al., 2001; Miranda et al., 2008; Ruengorn et al., 2011) y tienen más probabilidad de consumar el suicidio (Bradvik & Berglund, 2011; Scoliers, Portzky, van Heeringen, & Audenaert, 2009). Cada vez que una persona intenta suicidarse, el riesgo de repetición se incrementa en un 32% (Leon, Friedman, Sweeney, Brown, & Mann, 1990). Entre el 20% y 70% de las personas que se han suicidado presentan intentos suicidas previos (Trémeau et al., 2005); por lo tanto los repetidores suicidas son bastante comunes.

Ruengorn et al. (2011) y Spirito et al. (1992) encontraron que el 40% de las personas que intentan suicidarse realizan un nuevo intento 30-90 días después de abandonar el hospital. Sobre 1-2 años la tasa de repetición disminuye a 14-25% (Cedereke & Ojehagen, 2005; Colman, Newman, Schopflocher, Bland, & Dyck, 2004; Kapur et al., 2006). Estudios de seguimiento que van desde 4-10 años mostraron que la tasa de repetición de intentos suicidas incluso es mayor (Christiansen & Jensen, 2007; Groholt, Ekeberg, & Haldorsen, 2006; Haukka, Suominen, Partonen, & Lonnqvist, 2008). Como es evidente, las tasas de repetición pueden variar ampliamente dependiendo de la población de la cual provienen los repetidores que están siendo analizados y de los períodos de seguimiento. Sin embargo,

desde que los intentos suicidas son considerados como el más potente predictor de suicidios consumados, es fundamental en la actualidad identificar los factores que pueden predecir la repetición de estos intentos y distinguir repetidores de no repetidores (Dieserud, Røysamb, Braverman, Dalgard, & Ekeberg, 2003). Asimismo, optimizar los diseños metodológicos permitirá mejorar la comprensión y el análisis de este tipo de comportamientos.

6.3 Variables psicológicas y clínicas

En relación a las principales variables clínicas asociadas con repetidores, estos individuos tienen mayor posibilidad de tener familias con historia de trastornos psiquiátricos, como también trastornos afectivos tales como trastorno depresivo mayor, distimia, ánimo depresivo, trastorno bipolar entre otros (Bradvik & Berglund, 2011; Colman et al., 2004; Lopez-Castroman et al., 2011). Otros factores asociados con la repetición de intentos suicidas incluye trastornos previos, alta ideación suicida y letalidad, historia familiar de conductas suicidas, historia de tratamiento psiquiátrico y altos niveles de impulsividad (Bryan, Johnson, David Rudd, & Joiner, 2008; Cedereke & Ojehagen, 2005; Jeglic, Sharp, Chapman, Brown, & Beck, 2005; Monnin et al., 2012). Además, han sido relacionados con una historia de abuso emocional, físico y sexual (Andover, Zlotnick, & Miller, 2007; Jeglic et al., 2005). Factores psicológicos relacionados a la repetición de conductas suicidas han sido manejo activo de las cogniciones, alto puntaje en reacciones pasivas, desregulación emocional, mayor exposición a eventos de vida estresantes, pobres estrategias de resolución de conflictos, dependencia interpersonal, bajo sentido de eficacia personal, pobres relaciones familiares y bajo funcionamiento global (Bryan et al., 2008; McAuliffe, Arensman, Keeley, Corcoran, & Fitzgerald, 2007; Pompili et al., 2011).

7. Prevención de conductas suicidas

7.1 Aspectos generales

Considerando la compleja etiología del suicidio y además las importantes consecuencias sociales, familiares, individuales y económicas asociadas; la identificación de factores específicos relacionados con la conducta suicida es esencial para la prevención (Knox, Conwell, & Caine, 2004; National Mental Health Information Center, 2001).

Por otra parte, dado que existen sobre 450 millones de personas diagnosticadas con un trastorno mental en el mundo y el alto riesgo suicida presente en este grupo de personas (Hawton, Harriss, & Zahl, 2006; WHO, 2010) un diagnóstico temprano y un tratamiento efectivo son considerados aspectos fundamentales al analizar la elaboración de estrategias preventivas. Sobre el 83% de las personas que consumaron el suicidio fueron vistas un año antes por el médico de atención primaria y el 66% un mes antes (Andersen, Andersen, Rosholm, & Gram, 2000; Luoma, Martin, & Pearson, 2002). Sólo un tercio de las personas diagnosticadas con un trastorno del ánimo utilizaron los servicios formales de salud el año anterior al inicio de la conducta suicida y de ellos sólo el 50% recibió un tratamiento adecuado. Asimismo, algunos autores encontraron que enfermedades mentales del eje I del DSM-IV son en general infra diagnosticadas e inadecuadamente tratadas (Alonso et al., 2004). Es por ello que los esfuerzos preventivos deberían focalizarse en mejorar el diagnóstico temprano de los trastornos del ánimo, sobre todo, en los servicios de atención primaria a través de una formación más especializada de los profesionales de la salud mental y la entrega de un tratamiento efectivo.

Generalmente los programas buscan intervenir a población con alto riesgo suicida, facilitando y aumentando el acceso a los servicios de salud mental, mejorando el diagnóstico y tratamiento de trastornos afectivos y desarrollando estrategias de educación y cuidado en salud mental. Dichos programas son realizados por equipos interdisciplinarios de profesionales de la salud mental (psiquiatras, enfermeras, psicólogos y trabajadores sociales) y realizan seguimientos que van desde los 4 a los 18 meses (Carter, Clover, Whyte, Dawson, & D' Este, 2005; Hampton, 2010; Hvid & Wang, 2009).

Algunas intervenciones grupales utilizan grupo de control, ensayos controlados aleatorizados y comparaciones con tratamientos tradicionales para analizar su efectividad. Aunque no hay clara evidencia respecto a la eficiencia y efectividad de estos programas,

parecen actuar como un factor protector, contribuyendo a disminuir el número de intentos suicidas e incluso algunos de los programas han informado una reducción del 22 al 73% de la tasa de suicidio (Rutz, von Knorring, & Walinder, 1989; Szanto, Kalmar, Hendin, Rihmer, & Mann, 2007).

7.2 Programas de prevención

Cinco áreas de prevención del suicidio se han identificado como claves para la reducción de los riesgos y daños asociados (Mann et al., 2005): 1) Programas de educación y sensibilización para profesionales y público en general (campañas de educación pública, formación de médicos de atención primaria, formación de educadores); 2) Métodos de evaluación e identificación de personas de alto riesgo suicida; 3) Tratamiento de trastornos psiquiátricos (farmacoterapia, psicoterapia); 4) Restricción del acceso a medios letales (armas de fuego, pesticidas, etc.) y 5) Reporte de los suicidios por parte de medios de información (internet, medios de comunicación impresos y electrónicos).

Algunos programas de intervención, es posible diferenciarlos según su diseño y orientación teórica en programas cognitivo-conductuales entre ellos la terapia dialéctica conductual, la terapia breve basada en el manual de terapia cognitivo conductual y la terapia breve centrada en los problemas que incluyen 3 a 5 sesiones individuales durante un tiempo que puede variar de 3 a 12 meses (Evans & Pillay, 2009; Linehan et al., 2006). Estrategias e intervenciones multimodales con repetidores de intentos suicidas que incluyen 20 sesiones grupales organizadas en cinco módulos (educación emocional, resolución de conflictos, administración de crisis y habilidades sociales) y realizadas por un equipo interdisciplinario (Bergmans, Langley, Links, & Lavery, 2009; Bergmans & Links, 2002). Enfoques de intervención mínima o programas de administración de casos tales como la “green card”. Contacto e intervención breve y “conectedness” que entregan apoyo permanente y realizan seguimientos vía telefónica o a través de visitas domiciliarias durante semanas y meses según lo requiera el paciente (Bertolote et al., 2010; Carter et al., 2007; Evans, Morgan, Hayward, & Gunnell, 1999; Motto & Bostrom, 2001). Además, se encuentra el Modelo Baerum y el programa AIGOS que intentan mejorar la adherencia al tratamiento tras un intento suicida y reducir la probabilidad de recurrencia (Hvid & Wang, 2009; Vaiva et al., 2011).

Además de las terapias preventivas individuales y grupales, muchos países han desarrollado e implementado estrategias nacionales e internacionales de prevención del suicidio focalizadas en individuos de alto riesgo, incorporando unidades sociales claves como

lo son la familia y la comunidad. En el caso de alianzas internacionales la Europan Alliance Against Depression y el Optimising suicide prevention programs and their implementation in Europe buscan mejorar el diagnóstico y tratamiento de la depresión y la implementación de programas de prevención del suicidio (European Alliance Against Depression [EAAD]; OSPI Europe, 2009). Por otra parte, programas nacionales tales como el Finnish National Suicide Prevention Program (Kerkhof, 1999) que buscó descentralizar la intervención incorporando a otras unidades sociales, tales como grupos religiosos, la policía y otros actores locales. El programa finalizó con excelentes resultados, logrando reducir la tasa de suicidio de 30 por cada 100 mil a 18 por cada 100 mil habitantes. Asimismo, en Inglaterra el National Suicide Prevention Strategy for England (Departament of Health, 2002), implementó una intervención nacional mutisectorial, focalizada en la reducción del suicidio en grupos de alto riesgo, a través de la promoción del bienestar mental y reduciendo el acceso a métodos letales de suicidio. El objetivo del programa fue reducir el suicidio en un 20% para el año 2010 y durante los primeros tres años fue alcanzar una reducción del 7.4%. Asimismo, el Flemish Suicide Prevention Program (Flemish Mental Health Centres, 2007) logró disminuir en un 8% la tasa de suicidio entre los años 2000 y 2010.

La prevención del suicidio implica una aproximación multidimensional que debería incorporar no sólo las características individuales sino además la dimensión familiar, el apoyo social de otros significativos y de la comunidad con el objeto de asegurar mejores resultados al final de las intervenciones.

Aunque existen diversos métodos de intervención, el conocimiento sobre la prevención de conductas suicidas es aún insuficiente. Estudios transnacionales se hacen necesarios, ya que no todos los resultados de las investigaciones y de los programas de intervención son aplicables a diferentes contextos sociales. Se necesitan más estudios para lograr conocer la particularidad y especificidad de las diferentes poblaciones y grupos objetivo. Incluso aunque diversos autores han intentado identificar con mayor exactitud los factores implicados en el suicidio y sus efectos, están de acuerdo en la necesidad de que futuros estudios incorporen características biológicas, sociales, psicológicas y culturales que permitan mejorar la comprensión de este complejo problema de salud pública.

8. Objetivos

El objetivo principal de este trabajo es analizar las características específicas de las conductas suicidas en tres sub-poblaciones de riesgo:

1) Repetidores de intentos de suicidio, personas que intentan suicidarse en más de una ocasión a lo largo de su vida. Nuestro objetivo es averiguar si los repetidores se diferencian de los no repetidores, aquellos que han realizado un único intento, en las características de los intentos de suicidio, y en las variables sociodemográficas, clínicas o de personalidad.

2) Mujeres, la incidencia de intentos de suicidio es de tres a cuatro veces mayor en mujeres que en hombres en la mayoría de muestras estudiadas (con la excepción notable de determinados países como India o China). En este estudio queremos examinar como evoluciona el riesgo de realizar conductas suicidas a lo largo de la vida de la mujer, desde la infancia hasta la vejez, considerando las diferentes etapas del ciclo evolutivo.

3) Pacientes en riesgo de suicidio atendidos fuera de su domicilio, en comparación con otros pacientes atendidos en las urgencias hospitalarias. Nuestro objetivo es determinar si los pacientes que son atendidos en la vía pública por presentar ideas de suicidio o haber realizado una conducta de riesgo suicida se diferencian de los pacientes suicidas que han accedido al servicio de urgencias con otros orígenes.

Como objetivos secundarios describiremos las variables demográficas, clínicas y psicológicas de cada una de estas poblaciones y plantearemos nuevas estrategias de prevención e hipótesis de estudio para futuras investigaciones.

REVIEW

Suicide Reattempters: A Systematic Review

Pablo Mendez-Bustos, PsyD, Victoria de Leon-Martinez, BA, Marta Miret, MD, PhD, Enrique Baca-Garcia, MD, PhD, and Jorge Lopez-Castroman, MD, PhD

Learning Objectives: After participating in this educational activity, the psychiatrist should be better able to
1. Identify the characteristic features of suicide reattempters.
2. Evaluate the limitations of the literature.
3. Compare the characteristic features of single attempters and suicide reattempters.

The aim of this study is to identify the characteristic features of suicide reattempters. The recognition of the suicide reattempters population as a distinct clinical population may encourage future preventive and clinical work with this high-risk subgroup and thus reduce deaths. A systematic literature review was carried out in order to identify the key demographic, psychological, and clinical variables associated with the repetition of suicide attempts. In addition, we wished to analyze the operational definitions of the repetition of suicide attempts proposed in the scientific literature. Studies published from 2000 to 2012 were identified in PubMed, PsycINFO, and Web of Science databases and were selected according to predetermined criteria. We examined a total of 1480 articles and selected 86 that matched our search criteria. The literature is heterogeneous, with no consensus regarding the operational definitions of suicide reattempters. Comparison groups in the literature have also been inconsistent and include subjects making a single lifetime attempt and subjects who did not reattempt during a defined study period. Suicide reattempters were associated with higher rates of the following characteristics: unemployment, unmarried status, diagnosis of mental disorders, suicidal ideation, stressful life events, and family history of suicidal behavior. Additional research is needed to establish adequate differentiation and effective treatment plans for this population.

Keywords: attempted suicide, multiple suicide attempts, suicide

According to SUPRE, the World Health Organization's worldwide initiative for the prevention of suicide, by 2020 over 1.5 million people will die from suicide every year— one death every 20 seconds.[1]

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Informed estimates suggest that the number of people who attempt suicide annually may be 10 to 20 times that number,[2] and some researchers estimate that there may be as many as 40 attempts for every completed suicide.[3] In the United States an average of 538,000 suicide attempts was reported annually between 2005 and 2008.[4] Many individuals will attempt suicide once or several times in their lifetimes without completing suicide; it is well known, however, that individuals who have attempted suicide are at an increased risk for recurrence[5–7] and are more likely to be completers.[8,9] In fact, a meta-analysis of psychological autopsy studies found that about 40% of suicides had been preceded by at least one previous, nonfatal attempt.[10]

Repetition rates vary greatly as time passes from the initial attempt. In addition, the rates are dependent on the type of population being analyzed. Ruengorn,[7] Spirito,[11] and their colleagues found that nearly 40% of suicide attempters made a new attempt within 90 days of leaving hospitalized care. In the 1–2 years following discharge, the repetition rate of patients treated at medical emergency units varied from 14% to 25%.[12–15] When longer follow-ups were considered (4–10 years), the rate of suicide reattempts ranged from 20% to 55%.[16–20] Owens and colleagues,[21] in a systematic review of 90 studies analyzing the repetition of nonfatal self-harm in inpatient units and emergency departments, found that the repetition rate was 16% during the first year of

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follow-up, 21% from the second to the fourth year, and 23% after the fourth year. The evolution of repetition rates in suicide reattempters (SRs) could reflect a persistent vulnerability, which is in accordance with the stress-diathesis model of suicidal behavior.[22] This vulnerability could be increased during suicidal crises, coinciding with adverse life events or psychopathological changes.

Although in recent years research on SRs has grown, further studies on this specific population are needed[23–25] since much of the literature makes no distinction between single (that is, one time only) suicide attempters (SAs) and SRs.[26,27] Some authors have suggested that SRs are a clinically distinct group with greater levels of pathology and risk for future suicide attempts and death by suicide.[26,28] If unique characteristics can distinguish SRs from SAs, an increased understanding of these factors will help clinicians and researchers to identify high-risk groups. In addition, a better understanding of SRs could lead to interventions specifically tailored to prevent repetitive suicidal behavior and future suicides. Therefore, given the possibility that SRs and SAs may be differentiated as two clinically distinct groups, this review seeks to identify key demographic, psychological, and clinical variables associated with SRs and discern the operational definitions of repeated suicide attempts that have been proposed in the literature.

METHODS

Literature Search Strategy

Searches for articles were carried out in the electronic databases PubMed, PsycINFO, and Web of Science. The core set of keywords to identify articles was as follows: multiple suicide attempters; recurrent suicide attempts; repeated suicide attempt; repetition suicide attempt; reattempts AND suicide; suicide attempts AND multiple, several, frequent, repeaters, reattempts, OR recurrent. The keywords were limited to the title and abstracts. The abstracts of the retrieved articles were then checked by applying the eligibility criteria. In cases of doubt, full articles were read.

Inclusion Criteria and Reviewed Articles

Research on suicide has greatly increased over the last few decades, though the operational definitions for the different types of suicidal behaviors have been established only in the last few years.[29,30] Therefore, to limit the number of articles to review, and to avoid large methodological differences between the studies, we decided to limit our search to articles published in English, Spanish, and French from 1 January 2000 to 30 June 2012. The initial electronic search identified 1480 documents. After evaluating the abstracts of all these documents, we selected 86 articles that met the following criteria: (1) they were original articles examining the characteristics of SRs, and (2) the definition of suicide attempt was compatible with the one proposed by Silverman and colleagues (2007):[29] "self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence (either explicit or implicit) of trying to die," which is now used by the National Institute of Mental Health.[31] In addition, some articles examining the characteristics of self-harm were included in this review if the definition of self-harm explicitly involved at least some intent to die and therefore agreed with the cited definition of suicide attempt.[29] Selected studies are summarized in Table 1.

Most articles were retrospective in design (n = 49; 57.0%) and included adult subjects of both genders (n = 61; 70.9%). Several studies (n = 5; 5.8%) included only women, and one study (1.2%) included only men. Some studies focused specifically on adolescents (n = 20; 23.3%), and only one on the elderly (n = 1; 1.2%). Other researchers considered criminal (n = 2; 2.3%) or military (n = 3; 3.5%) populations. Regarding the study design, we found that the literature could be classified as follows: comparison with single suicide attempters (n = 36; 41.9%), comparison with suicide attempters not having reattempted after an in dex attempt (n = 27; 31.4%), and other methodologies (n = 23; 26.7%).

The assessment instruments most frequently used were the Beck Depression Inventory (n = 23; 26.8%), Beck Hopelessness Scale (n = 18; 20.9%), Scale for Suicide Ideation (n = 17; 19.8%), Suicide Intent Scale (n = 17; 19.8%), Barratt Impulsivity Scale (n = 9; 10.5%), and Hamilton Depression Rating Scale (n = 8; 9.3%). The clinical diagnostic tools mainly used were the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) (n = 41; 47.7%) and *International Classification of Diseases* (ICD) (n = 17; 19.8%). A large majority of studies were performed in Europe or the United States (n = 75; 87.2%), whereas only 11.6% were performed in Asia and Oceania (n = 10) and one in South America (1.2%). No studies were conducted in Africa.

RESULTS

Definition of Suicide Reattempters

The various operational definitions of SRs used in the literature show the lack of consensus in this area of study. The inconsistency can lead to erroneous estimations of the burden and prevalence of suicide.[24,41,98] Most of the studies reviewed recruited the patients in emergency rooms after what was considered the "index" suicide attempt. In some studies, this index attempt served as a baseline to quantify the number of attempts. Repeaters were thus defined as those who made a subsequent attempt after their index attempts. In other studies, the number of lifetime attempts as reported by the patients or registered in clinical databases was used to define SRs.

A large majority of studies defined SRs as those who made more than one suicide attempt (n = 71; 82.5%). Other authors defined SRs as those who made three or more attempts (n = 4; 4.7%), and several studies did not specify a definition for SRs (n = 11; 12.8%). In summary,

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Table 1

Literature Review of Studies Examining Suicide Reattempters

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Prospective studies				
Joiner & Rudd (2000)[28]	326 USA Military	Index	SA[a]	Negative life events were related with longer duration of psychological crisis but not with severity of suicidality
Hultén et al. (2001)[5]	1720 Europe Adolescents	Index	NR[b]	Violent method of suicide attempt
De Leo et al. (2002)[32]	752 Europe Elderly	Index	NR	Parental loss in childhood; household economic problems; more frequent suicide intent; negative perception of own mental health & social support
Dieserud et al. (2003)[33]	50 Norway	Index	NR	Low sense of general self-efficacy; low self-appraised problem-solving capacity
Hawton et al. (2003)[34]	111 England	Unspecified	NR	Psychiatric comorbidity
Askénazy et al. (2003)[35]	69 France Adolescents	≥3	NS[c]	Increased anxiety & impulsivity
Corcoran et al. (2004)[36]	4463 Ireland	Index	NR	Male gender, particularly in the age group 30 to 40 years
Courtet et al. (2004)[37]	103 France	Index	NR	S allele of *5-HTTLPR* & higher impulsivity
Milos et al. (2004)[38]	288 Switzerland Females	≥2	NS	Bulimia nervosa; Axis I (affective disorders) & Axis II (Cluster B disorders) comorbidity
Cedereke & Öjehagen (2005)[12]	246 Sweden	≥3	NR	Early repetition of suicide attempt; lower global functioning; increased Pierce's Suicidal Intent Scale score
Kapur et al. (2006)[15]	9213 England	Index	NR	Psychiatric treatment; being unemployed or registered sick; self-injury; alcohol misuse; reporting suicidal plans or hallucinations at the time of the index episode
Groholt et al. (2006)[18]	92 Norway Adolescents	Index	NR	Negative affect; increased hopelessness; low self-esteem; increased BDI score; history of treatment for mental or behavioral problems; greater number of diagnoses
Christiansen & Jensen (2007)[16]	41824 Denmark	Index	NR	Psychiatric hospital admission; use of anxiolytics, antidepressants, sedatives & hypnotics
Andover et al. (2008)[39]	121 USA	≥2	SA	Depressive symptoms & suicidal ideation
Bryan et al. (2008)[40]	217 USA Military	Index	SA	Higher suicidal ideation; depressive & hypomanic symptoms

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Table 1
Continued

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Prospective studies				
Miranda et al. (2008)[6]	228 USA Adolescents	≥2	SA	Anxiety disorders; substance abuse or dependence; greater desire to die & to repeat suicide attempts
Chandrasekaran & Gnanaselane (2008)[13]	341 India	Index	SA	Major depressive disorder, increased stress & hopelessness; lower global functioning; history of psychiatric treatment
Haukka et al. (2008)[19]	18199 Finland	≥2	NR	Hospitalization due to schizophrenia; mood disorder; personality disorder; alcohol-related disorder
Wong et al. (2008)[41]	1099 China Adolescents	≥2	NR	Suicidal ideation; depressive symptoms; substance use disorder; anxiety; life stress; poor family relations
Goldston et al. (2009)[42]	180 USA Adolescents	Index	SA	Major depressive disorder; dysthymic disorder; generalized anxiety disorder; panic disorder; attention-deficit/hyperactivity disorder
Sjöström et al. (2009)[43]	165 Sweden	≥2	NR	Frequent nightmares
Scoliers et al. (2009)[9]	359 Belgium	Index	NR	Increased suicidal ideation scale scores; increased BDI scores; higher levels of anxiety
Groholt & Ekeberg (2009)[44]	92 Norway Adolescents	Index	NR	Increased BDI scores; schizophrenia; eating disorders; substance use disorders; personality disorders
Wichstrom (2009)[45]	9679 Norway Adolescents	Index	NR	Perceived early pubertal development in women; suicidal ideation; alcohol poisoning; not living with both parents; low self-esteem
Heyerdhal et al. (2009)[14]	2062 Norway	Index	NR	Use of opioids & sedatives; unemployment; social welfare subsidy; history of psychiatric treatment; previous suicide attempts
Bradvik & Berglund (2009)[46]	100 Sweden	≥2	NS	In females, older age (with increased repetition in suicide victims as compared to matched, severely depressed controls)
Waern et al. (2010)[47]	165 Sweden	Index	NR	Suicide Assessment Scale score >30
Kudo et al. (2010)[48]	1348 Japan	Index	NS	Exposure to stressful life events
Dedić et al. (2010)[49]	30 Serbia	Index	NS	Increased total score on Pierce's Suicidal Intent Scale & its circumstances subscale
Robinson et al. (2010)[50]	413 Australia	Index	SA	Increased depression scores (BDI); history of problematic alcohol use
Ruengorn et al. (2011)[7]	235 Thailand	≥2	NR	Use of antipsychotics & antidepressants; selective serotonin reuptake inhibitor alone or concomitantly with norepinephrine or serotonin reuptake inhibitors

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Table 1
Continued

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Prospective studies				
Bradvik & Berglund (2011)[8]	80 Sweden	≥2	NS	Depressive episodes
Nrugham et al. (2012)[51]	2464 Norway Adolescents	≥2	SA	Increased BDI scores; not living with both biological parents; less task-oriented coping; increased emotional coping
Monnin et al. (2012)[52]	273 France	Index	NR	Psychiatric treatment; posttraumatic stress disorder; recurrent psychotic syndrome; substance use disorder
Nodentoft et al. (2008)[53]	351 Denmark	≥2	NR	Not associated with gender, violent or dangerous methods, depression, hopelessness, or Pierce's Suicidal Intent Scale score
Hayashi et al. (2012)[54]	106 Japan	≥2	NR	Anxiety disorders; cluster B personality disorders; adolescent maltreatment
Sjöström et al. (2012)[55]	155 Sweden	Index	NR	Low scores on Sense of Coherence Scale
Retrospective studies				
Vajda & Steinbeck (2000)[56]	121 USA Adolescents	Index	NR	Sexual abuse history; chronic illness; alcohol & substance abuse; non-affective psychotic disorder
Vidal et al. (2001)[57]	36 France	≥2	NS	Background chronic alcoholism & psychiatric treatment; use of alcohol during the attempt
Brådvik & Berglund (2002)[58]	89 Sweden	≥3	NS	Higher number of depressive episodes; exposure to stressful life events
Esposito et al. (2003)[59]	121 USA Adolescents	Index	SA	Mood disorder; higher levels of hopelessness; anger; affect dysregulation & major self-mutilation; disruptive behavior disorder
Michaelis et al. (2003)[60]	52 USA	≥2	SA	Lower seriousness of suicidal intent at the first attempt
Osváth et al. (2003)[61]	1158 Europe	Index	SA	Divorced; unemployment or economically inactive; personality disorder; mood disorder; alcohol abuse; psychotic disorder
Dougherty et al. (2004)[62]	50 USA	≥2	SA	Increased motor impulsivity; lifetime history of aggression; anxiety & depression; low education
Forman et al. (2004)[26]	153 USA	≥2	SA	Increased suicidal ideation & greater number of Axis I diagnoses; low global functioning; higher levels of depression & hopelessness; poor conflict-resolution skills; psychotic disorder; substance abuse; history of emotional abuse in childhood; family history of mental illness & suicide

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Table 1
Continued

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Retrospective studies				
Ystgaard et al. (2004)[63]	74 Norway	Index	SA	Physical & sexual abuse
Rudd et al. (2004)[64]	332 USA	≥2	SA	Early (childhood) major depressive disorder; early (childhood) anxiety disorders
Pettit et al. (2004)[65]	123 USA Military	≥2	NS	Increased pre-attempt stress & severity of symptoms; higher number of suicide attempts
Talbot et al. (2004)[66]	127 USA Females	Index	NS	History of childhood sexual abuse
Jeglic et al. (2005)[67]	180 USA	≥2	SA	Family history of suicide
Mechri et al. (2005)[68]	90 France	Unspecified	SA	Divorced or separated; unemployment; family with psychiatric disorder; history of previous suicide attempts; large families (>4); stress experienced 6 months prior to suicide attempt
Rosenberg et al. (2005)[25]	16,644 USA Adolescents	≥2	SA	Sexual abuse; depressive mood; alcohol & substance abuse; participation in violent behavior
Gibb et al. (2005)[69]	3690 New Zealand	≥2	NR	Female; younger age; low lethality methods at index attempt
Fekete et al. (2005)[70]	1158 Hungary	Unspecified	NS	Female; unemployment; living alone; never married
Tremeau et al. (2005)[10]	480 France	Unspecified	NS	Family history of suicide
Laget et al. (2006)[24]	570 Europe	Goldston	SA	Increased BDI score; alexithymia; Minnesota Multiphasic Personality Inventory (greater scores in the scales for depression, psychopathy, paranoid, psychasthenia, schizophrenia & addiction admission); greater anger & anxiety
Kaslow et al. (2006)[71]	274 USA Females	Index	SA	Marital status (divorced, separated, widowed); homelessness; psychiatric treatment history; higher levels of suicide intent; planning & lethality; global psychological stress; traumatic experience during childhood; hopelessness
Wang & Mortensen (2006)[72]	125 Norway	≥2	SA	Influence of alcohol
Brodsky et al. (2006)[73]	80 USA	Unspecified	NS	Comorbid borderline personality disorder plus major depressive disorder
Andover et al. (2007)[74]	121 USA	≥2	SA	Increased BDI score; sexual & physical abuse

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Table 1
Continued

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Retrospective studies				
Foulon et al. (2007)[75]	304 France Adolescents	Unspecified	NS	Binging/purging subtype anorexia nervosa & depression
Asarnow et al. (2008)[76]	210 USA Adolescents	≥2	SA	Depression; substance use; externalizing problems; thought problems; medication treatment; total stress
Brezo et al. (2008)[77]	1903 Canada Adolescents	≥2	SA	Compulsivity; identity problems; insecure attachment; emotional dysregulation; anxiousness; dissocial behavior
Pagura et al. (2008)[27]	9484 USA	≥2	SA	Being threatened with a weapon, held captive or kidnapped, or being physically assaulted, before age 16; being physically abused as a child; comorbidity of 3 or more mental disorders; any mood disorder; any anxiety disorder; any substance disorder; poverty; low education
Lindqvist et al. (2008)[78]	35 Sweden	Index	NS	Lower levels of cortisol in the morning & at lunchtime (in females)
Gibb et al. (2009)[23]	121 USA	≥2	SA	Increased levels of suicidal ideation & depressive symptoms; early-onset major depression
Merchant et al. (2009)[79]	122 USA Adolescents	Index	SA	Low perception of support by family, friends & nonrelatives on the Perceived Emotional-Personal Support Scale;[80] higher scores on the subscale of social comparison & interpersonal orientation
da silva Cais et al. (2009)[81]	203 Brazil	≥2	SA	Increased BDI score & hopelessness
Géhin et al. (2009)[17]	65 France Adolescents	Index	NR	Early repeated attempts
Arling et al. (2009)[82]	218 USA	Unspecified	NS	Toxoplasma gondii antibody titers
Chen et al. (2009)[83]	146 USA Females	≥2	NS	Somatic disorders; bulimia nervosa
Lizardi et al. (2009)[84]	190 USA	Unspecified	NS	Familial history of suicidal behavior; higher levels of aggression; fewer reasons for living
Schillani et al. (2009)[85]	39 Italy	Unspecified	NS	Number of negative life events experienced during 6 months preceding each suicide attempt & S allele of *5-HTTLPR*
Spokas et al. (2009)[86]	180 USA	Unspecified	NS	History of childhood sexual abuse; posttraumatic stress disorder; borderline personality disorder; increased hopelessness & suicidal ideation

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Table 1
Continued

Authors & year	n Country Sample	Operational definition	Study design	Main variables associated with suicide reattempters
Retrospective studies				
Jeon et al. (2010)[87]	6510 Korea	≥2	SA	Younger age (18–29 years old); bipolar disorder; specific phobia; generalized anxiety disorder; marital status (divorced, separated, widowed); low income; posttraumatic stress disorder
Yoder et al. (2010)[88]	405 USA Adolescents	≥2	SA	Lower self-esteem & more suicidal ideation; exposure to family suicide & suicidal ideation; family history of mental health problems; higher levels of family neglect; family physical & sexual abuse; anger & hopelessness; conduct disorder
Dale et al. (2010)[89]	154 UK	Index	NS	Early maladaptive schemes & parental control
Mathias et al. (2011)[90]	59 USA Female adolescents	≥2	SA	More impulsive; greater depression & greater lifetime history of aggression; greater suicidal ideation
Hakansson et al. (2011)[91]	1404 Sweden Prison inmates	≥2	SA	History of excessive alcohol; heroin; maternal psychiatric problems; tranquilizers or cannabis consumption; chronic medical conditions; emotional, physical & sexual abuse; depression; anxiety; eating disorders
Oh et al. (2011)[20]	967 South Korea	Index	SA	Female sex; unemployment; not living with family; history of psychiatric treatment
Pompili et al. (2011)[92]	526 USA	≥2	SA	Stressful events during childhood & adolescence; low social support; early age of onset of mental illness
Jakobsen et al. (2011)[93]	4170 Denmark Adolescents	≥2	SA	Diagnosis of any psychiatric illness; mental disorders due to substance use; psychotic disorders; affective disorders (other than depression); depressive disorders; neurotic disorders; behavioral disorders; personality disorders; greater frequency of registered contacts with inpatient psychiatric departments; number of diagnoses; antipsychotic drugs; antidepressant drugs
Lopez-Castroman et al. (2011)[94]	1349 Europe	≥3	NR	Age at first attempt; anxiety disorder; alcohol & drug use disorders
Mandelli et al. (2011)[95]	1552 Italy Male prison inmates	≥2	NS	Early age at onset of suicidal behavior; sexual abuse
Cankaya et al. (2012)[96]	106 Turkey Females	≥2	SA	Childhood sexual abuse
Lopez-Castroman et al. (2012)[97]	878 France	Unspecified	NS	Childhood abuse & family history of suicidal behavior

BDI, Beck Depression Inventory; *5-HTTLPR*, serotonin transporter gene.
[a] Comparison with single attempters.
[b] Comparison with subjects not reattempting after an index attempt.
[c] Other methodologies (nonspecified).

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the following are the operational definitions of SRs that have been adopted:

1. SRs defined by an "index" suicide attempt[5,33,74] or as subjects who made two or more suicide attempts.[26,41,67]
2. SRs defined as having made three or more attempts.[35,58,99]
3. Based on the typology originally proposed by Goldston,[24,100] five types of suicide attempters defined, depending on the history of suicidal behavior: (a) a recent first suicide attempt, (b) a recent second or subsequent suicide attempt, (c) no recent attempts, (d) no suicide attempts, and (e) repetition of a suicide attempt at least one year before the interview.
4. Based on the work of Hengeveld,[101] one study examined the characteristics of "grand repeaters": subjects who had made more than four attempts.[102]

Comparison with Single Attempters

Female sex[20] and young age (18–29 years)[87] have been linked with SRs, but a majority of articles did not find significant differences in age or gender when comparing SRs to single attempters. Other sociodemographic differences, however, were repeatedly reported. Compared to SAs, SRs were more often unmarried or living alone,[20,71,87] and had lower education levels[27,62] and higher levels of unemployment.[61,68]

Regarding clinical features, the main differences between SRs and SAs are detailed in Table 2. To summarize the probabilities of factors associated with SRs versus SAs, we have selected the median value of odds ratios (ORs) and their ranges throughout the literature.

SRs were more likely to meet criteria for affective disorders, such as major depression or bipolar disorder,[23,62,74,81] alcohol and substance use disorders,[27,61,71] anxiety disorders,[27,62,64,87] psychotic disorders,[26,61,68] and personality disorders.[61,96] Other clinical variables associated with SRs were greater suicidal ideation and lethality scores,[26,39,40,71] family history of psychiatric disorders or suicidal behaviors,[26,67,68] greater number of hospitalizations, more frequent current or prior psychiatric treatment, and comorbidity of three or more mental disorders.[20,27,67] Additionally, SRs were associated with psychological factors, such as higher motor impulsivity, hopelessness, and poor conflict-resolution skills,[26,62,67] and environmental stressors, such as negative or stressful life events, lifetime history of aggression,[28,62] and traumatic experiences during childhood and adolescence.[26,27,71] Of note, the intensity of negative life events may be associated with longer psychological crises but not with the severity of suicidal ideation among SRs.[28]

Studies of adolescent samples showed distinctive differences between SRs and SAs. Apart from most of the above-mentioned clinical factors, adolescent SRs are more likely to present with attention-deficit/hyperactivity disorder, disruptive or dissocial behaviors, nonsuicidal self-harm, and greater desire to die.[6,42,59,77,88] Adolescent SRs are also less likely to be living with both biological parents and more likely to have had stressful life events, low social support, and early age of onset of mental illnesses.[51,92] Regarding psychological factors, adolescent SRs were more likely than SAs to present with low self-esteem, insecure attachment, emotional dysregulation, impulsivity, and thought problems.[59,77,88,90]

Comparison with Subjects Not Reattempting After an Index Attempt

The studies reviewed in this section examined suicide attempters after an index attempt, regardless of previous history of suicidal behavior; that is, subjects who reattempted suicide during the study period (SRs) were compared to those that did not reattempt (NRs).

Studies that compared SR and NR populations found differences that were similar to those reported between SRs and SAs (Table 1). Unemployment, low social support, and life stress were more common in SRs than is NRs.[14,41] They also reported more psychiatric disorders (mood, anxiety, psychotic, and substance use disorders), more frequent history of psychiatric treatments, more psychiatric comorbidity, and higher scores in measures of suicidal ideation.[9,16,19,34] In addition, SRs had lower global functioning, and psychological factors, such as low sense of general self-efficacy, increased hopelessness, impulsivity, and low self-appraised problem-solving capacity, were more common in SRs than in NRs.[12,13,18,33] In one study, elderly SRs had more negative perceptions of their mental health and of the social assistance that they received, and were also more likely, during childhood, to have had a parent who died.[32] A study investigating sleep problems in SRs reported an association with frequent nightmares.[43]

Other Study Designs

The studies included in this section are methodologically diverse. Some of them reported the characteristics of SRs as secondary findings in samples of those affected by a particular mental disorder, whereas others analyzed factors associated with the number of suicide attempts without specifying a definition of SRs.

Several studies confirmed the association of SRs with many of the above-mentioned factors (Table 1).[35,70,86] Comorbidity with depression increased the risk of repeated suicide attempts in patients with borderline personality disorder[73] and eating disorders.[38,75] One repeated finding was the association of SRs with stressful life events,[48,65,85] particularly childhood abuse.[66,95,97] Lizardi and colleagues[84] found that the number of suicide attempts was associated with a family history of suicidal behavior and fewer reasons for living. Other studies also linked family history of suicidal behavior with SRs,[10] especially when combined with childhood abuse.[97] Interestingly, post-mortem studies

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Table 2
Main Clinical Variables Associated with Suicide Reattempters When Compared to Single Suicide Attempters

Main clinical variables (number of references)	Summarized features	Probability median (range)[a]
Affective disorders (18)	Any affective disorder	OR = 2.3 (1.8–2.7)
	Major depressive disorder or dysthymic disorder	OR = 4.0 (3.4–5.0)
	Affective disorders (other than depression)	HR = 2.2
	Depressive disorders	OR = 1.2 (1.0–1.3)/HR = 1.6
	Bipolar disorder	OR = 30.6
Anxiety disorders (9)	Any anxiety disorder	OR = 1.6 (1.4–1.8)
	Neurotic, stress-related, & somatoform disorders (ICD-10)	HR = 2.2
	Generalized anxiety disorder	OR = 5.7
	Posttraumatic stress disorder	OR = 17.6
	Specific phobia	OR = 2.5
	High anxiety scores/panic disorder	N/C
Alcohol or substance use disorders (9)	Any substance use disorder	OR = 2.3 (2.1–2.5)
	Alcohol abuse	OR = 1.6 (1.4–1.8)
	Substance abuse	OR = 2.5 (2.0–2.9)
	Higher score in the MMPI addiction admission scale	N/C
	Drug or alcohol use or substance abuse treatment (MAST)	N/C
Psychotic disorders (3)	Any psychotic disorder	OR = 6.3 (6.2–6.3)/HR = 2.6
Personality (9)	Any personality disorder	OR = 5.0/HR = 2.9
	Compulsivity/anxiousness (DAPP-BQ)	OR = 2.0/OR = 1.1
	Higher score in the MMPI psychopathic scale	N/C
	Higher anger/impulsivity	N/C
	Higher levels of affect dysregulation	N/C
	Lifetime history of aggression	N/C
	Low scores in Sense of Coherence (associated with high suicidality)	N/C
Psychiatric comorbidity (3)	Three or more mental disorders	OR = 3.7
	Higher diagnostic comorbidity	N/C
Suicidal ideation, intent, planning & lethality (7)	More suicidal thoughts/suicidality	N/C
Family history of suicide behavior (3)	Family history suicide attempt	OR = 2.6
	Family history of suicide	N/C
Family history of mental illness (1)	Family history of mental illness or substance abuse	OR = 3.1
Medical history (3)	More hospitalizations	N/C
Experiences of childhood abuse (7)	Childhood emotional abuse	OR = 1.65 (1.4–1.9)
	Childhood sexual abuse by a parental figure or a parent	OR = 12.3
	Childhood physical or sexual abuse	OR = 2.5 (1.3–5.0)
Hopelessness (3)	Higher levels of hopelessness	N/C

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Table 2
Continued

Main clinical variables (number of references)	Summarized features	Probability median (range)[a]
Social functioning (7)	Low social support	OR = 2.0
	Externalizing problems	OR = 1.0
	Poorer conflict resolution strategies	N/C
	Higher levels of psychological distress	N/C
	Relationship difficulties / poorer interpersonal functioning	N/C
	Lower self-esteem & perceived social support	N/C
Pharmacological medications prescribed (4)	Any psychotropic treatment	OR = 2.0
	Antipsychotics	HR = 2.4
	Antidepressants	HR = 2.1
	Psychopharmacological treatment before admission	OR = 4.4

DAPP-BQ, Diagnostic Assessment of Personality Pathology–Basic Questionnaire; HR, hazard ratio; ICD-10, International Classification of Diseases, 10th rev.; MAST, Michigan Alcoholism Screening Test; MMPI, Minnesota Multiphasic Personality Inventory; N/C, not calculated; OR, odds ratio.

[a] Odds ratios and hazard ratios are included when reported in the literature. When the probabilities were reported by more than one study, median values and ranges were calculated.

noticed that repeated suicide attempts during advanced age in women or during episodes of depression later in life were more often associated with suicide than with any other causes of death.[8,46]

Neurobiological Factors

A few studies have examined biological factors in relation to SRs. Genetic vulnerability may, it appears, contribute to the repetition of suicide attempts.[85] Some authors have reported that certain variants of the tryptophan hydroxylase 1 gene (*TPH1 A218C*) and the serotonin transporter gene (*5-HTTLPR*) increase the risk for repeated suicide attempts. In addition, individuals carrying at least one S allele of *5-HTTLPR* may be more prone to repeated attempts.[37,85,103] Alterations of the hypothalamic-pituitary-adrenal axis—a system closely linked to stress regulation—may also be associated with an increased risk of suicide attempt repetition.[78,104] Arling and colleagues[82] found no association between Toxoplasma gondii seropositivity and the number of suicide attempts in patients with recurrent mood disorders—though they did find an association between Toxoplasma gondii antibody titers and suicide attempts.

Risk of Completing Suicide

The probability of completing suicide is proportional to the number of attempts[52] and has been estimated to increase 32% with each attempt.[105] Nock and Kessler[106] emphasized a strong link between repeated attempts and suicide completion. In follow-up studies conducted between one and five years after a suicide attempt, median proportion varied from 2% to 10%,[16,21,72] These rates were four times higher in a follow-up study over nine years.[21] By contrast, the reported incidence of completed suicide among control groups is 0.04%.[16] Bradvik and Berglund[8] found that 46% of the subjects included in their group of completed suicides had attempted suicide previously. It has been suggested that attempters are approximately 66 times more likely to complete suicide than people with no history of attempts.[107] Michaelis and colleagues[60] suggested that the first attempt of future SRs might be less severe than those of SAs.

DISCUSSION

The economic and social consequences of suicide attempts have led to an increase of research on this type of behavior.[24,25,108] Suicide attempters frequently repeat. It is estimated that for every suicide, there are 5 hospitalizations and 22 emergency room visits due to nonfatal suicide-related behaviors.[31] Indeed, according to most studies, 16% to 34% of the subjects repeat within the first 1–2 years after a suicide attempt.[7,12,13,15,18] Moreover, a European study found that over 50% of the attempters repeated during the first year of follow-up.[109] Many authors have suggested that classifying the large number of attempters into SAs and SRs could help to predict future suicidal behaviors and improve suicide-prevention strategies.[27,33,110] Specifically, the identification of the particular profile of SRs could differentiate this population and avoid an overestimation of the number of suicide attempters. The economic costs associated with the use of health care systems, as well as the medical and emotional burden for individuals themselves and for their families,[15,111,112] support the need for specific research on SRs.

This systematic review shows the importance of SRs as a high-risk clinical subgroup and may help to differentiate SRs from SAs by the identification of specific clinical and sociodemographic variables. The reviewed studies have

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identified numerous characteristics associated with SRs in three graded levels: compared to SAs, compared to NRs, and using other methodological designs.

From a clinical standpoint the differences between SRs and SAs are the most relevant (Table 2). When compared to SAs, SRs were excessively associated with demographic risk factors for suicide, such as unemployment, mental disorders (including mood, anxiety, psychotic, and substance use disorders), and psychiatric comorbidity. Even though young age and female sex have been repeatedly associated with a greater risk of nonfatal suicidal behaviors,[52] the review of the literature did not provide a profile of SRs based on age or gender. Regarding psychological features, SRs were more likely than SAs to be diagnosed with personality disorders (particularly borderline personality disorder), and they presented with greater levels of impulsiveness, hopelessness, and anger, and with inadequate conflict-resolution strategies. Adverse life events, such as childhood abuse, also seem to be particularly associated with SRs. Regarding other factors related to suicidal risk, and in relation to SAs, SRs reported greater suicidal ideation, longer psychological crises, and more frequent history of suicidal behavior in their families. Importantly, most of the differences between SRs and SAs were replicated in studies that used other methodological designs. It should also be noted that many of the differential features of SRs are well-known risk factors for suicide. Overall, this systematic review corroborates that subjects making repeated suicide attempts are an especially vulnerable population.

Methodological changes are needed to improve the characterization of SRs.[110] For example, the use of larger sample sizes would avoid major imbalances in the distribution of sociodemographic variables such as age and sex. In addition, a greater consensus on the use of data-collection instruments could improve the external validity of the results achieved. Apart from these changes, it is essential to achieve greater consensus on both the conceptual and operational definitions of SRs. The lack of consistent definitions of suicidal behavior across studies has led to confusion in the field of suicidology.[30] Definitional clarification would help to avoid confusion with terms like *self-harm* or *self-injury without intent of death*. Additionally, the geographical distribution of the studies illustrates the importance of studying this topic outside Europe and North America in order to avoid cultural biases in interpreting results; in this context, cross-national studies would be useful, too. And though the repetition of suicide attempts may differ significantly across age groups, only adolescents have been distinctly analyzed regarding such repetition: adolescent SRs, versus SAs, are more likely to have psychiatric disorders, environmental stressors, and personality traits that are generally associated with suicidal behavior.

Since the designs, sample sizes, and populations for the 86 selected studies are diverse, they cannot be compared directly, especially in the continuing absence of a consensual definition of SRs. Moreover, many studies did not use adequate comparison groups to investigate the specific characteristics of SRs. For instance, many authors did not consider whether the subjects had made attempts prior to their inclusion in the studies after an index attempt. Those studies lack sufficient validity to assess the specific characteristics of SRs. Moreover, the study periods often lasted less than two years and may therefore fail to reflect the actual prevalence of repeat suicide attempts. To increase the validity of our findings, we have thus tried to focus our review on studies specifically comparing SRs with SAs, which were mostly retrospective in design and often limited by a memory bias. In addition, under-declaration of suicidal behaviors might hamper the identification of repeated suicide attempts.[17]

Although it is possible to create a profile of the high-risk population of SRs by analyzing previous scientific literature, further research is needed to compare results and obtain more reliable information on their characteristics. Furthermore, future studies should focus on the comparison between SRs and SAs to delineate the particular features of each group. These efforts could lead to the division and reclassification of reattempters into clinically meaningful subgroups. For instance, the triggering effect of external events and the distribution of suicide attempts could be examined in relation to the repetition of suicide attempts.[84] In fact, the probability of repeating a suicide attempt seems to be higher in the immediate aftermath of a previous attempt,[94] but a history of multiple attempts may affect the long-term course of post-crisis suicidality.[113] Examining the distribution of these acts and their relation to external events could help to differentiate subjects with permanent vulnerability traits for suicidal behavior from "grand repeaters" who may use suicidal acts as a communication strategy.

Due to variations in the risk of relapse and suicide completion, separate consideration of SRs and SAs may have clinical implications for both prevention and treatment. More effective recognition and treatment of the underlying psychiatric and social conditions of suicide attempters have special importance in efforts to prevent future suicidal behavior.

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Review Article

Life Cycle and Suicidal Behavior among Women

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It is nowadays accepted that, independently of methodological issues, women commit fewer suicides than men but make more frequent attempts. Yet, female suicidal risk varies greatly along the lifetime and is linked to the most significant moments in it. A wide analysis of the existing literature was performed to provide a narrative description on the evolution of female suicidal rates from childhood to old age, considering the milestones in their life history. A detailed analysis of gender differences in suicidal behavior is key to establish preventive measures and priorities. More specific studies are needed to adapt future interventions on female suicide.

1. Introduction

A vast majority of epidemiological studies performed in diverse cultures and countries show gender differences in suicidal behavior. In developed countries, the completed suicides are 2 to 4-fold more frequent among men [1–3], while suicide attempts are 2 to 3-fold more frequent among women [4–6]. However, suicide rates vary significantly between regions and countries. In Europe, northern countries report higher suicide rates [7]. Developed countries have higher male to female ratios than Asian countries [8, 9], although the estimated global male/female suicide ratio is 1.67 to 1 and not 3 to 1 [10]. Young women may be particularly exposed to suicidal risk [6, 11]. For instance, during 2005 suicide was the fourth cause of death in the United States (US) among women aged 15–44 years [12]. The rates of suicidal ideation and attempts among females are notably increased after puberty [13]. It has been calculated that in the US a woman attempts suicide every 78 seconds and dies of it every 90 minutes [14].

The higher frequency of completed suicides among men and suicide attempts among women is called the gender paradox and has been reported on many different countries. This paradox is absent in India and China where women and men present similar suicide rates [10, 15] due to the high rates of completed suicide among rural young women [16, 17]. In addition, suicide among Indian and Chinese women may be favored by the use of lethal methods such as self-burning in India and pesticides in China [17–19]. It is of note that female suicide rates in South Korea have increased from 1.1 (1986) to 4.2 (2005) per 100.000 [20]. The limitations to obtain national suicide data from undeveloped countries remark the presumed importance of cultural dimensions. It must be remembered that WHO counts with trustworthy information on death causes covering about 13% of the world population and actualized mortality data on 25% of the world population is lacking [21].

Not considered to be a methodological artifact [4], a lack of agreement on the origin of the gender paradox persists. Proposed explanations are based on the differential suicidal methods, which may condition lethality, disposal, and cultural acceptance [3, 22]. Usually, males use methods such as shooting by firearm, hanging, or suffocation, while females

attempt poisoning, wrist cutting, or falling from heights [2]. Durkheim [23] suggested that suicide is influenced by individual traits but also by the characteristics and changes of the society. Males appear to be more affected by external factors, such as economic crisis, than females [24–27].

The study of sexual dimorphism is constraint by the variations of risk factors between generations. For example, McIntosh [28] analyzed the rates of suicide between baby-boomers (born in the 1943–1960 period) and the 13th generation (born in the 1961–1981 period) in the US. Following his results, the suicidal risk is increased among subjects of the 13th generation when considering the same chronological age. Some authors have informed as well on a reduction in the global rates of suicide in recent years, especially among aged women and despite a subtle increase among young men [29]. The WHO/EURO multicentre study [30] reported that suicide rates had diminished by 17% among men and 14% among women from 1989 to 1992. Others point out that the gender rate of completed suicide in the USA has remained stable around 2.5 : 1 (2.5 fold more frequent completed suicides among men) from 1930 to 1971, but has increased ever since reaching a proportion of 4.4 : 1 in the last decade of the nineties [14]. Nevertheless, studies analyzing different time periods in developed countries found that the suicide rate in women has increased over time [31, 32].

Besides, global ratios may conceal bigger differences among gender during the vital cycle. Hawton and Harriss [33] analyzed a large sample of self-aggressions admitted to the hospital in a 10-year interval. Gender ratio was globally close to 1.5 women for each man. However, this coefficient varied greatly between age groups and decreased with advancing age, from 8:1 among the younger (10–14 years of age) to 0.8:1 among the elder (>50 years of age).

The present study is focused on the longitudinal evolution of the suicidal behavior in women and particularly at some significant moments of women's lifetime: childhood/adolescence, reproductive cycle/pregnancy, middle-aged/marital status, and old age (see Figure 1 and Table 1).

2. Suicidal Behavior in Childhood, Adolescence, and Youth

Infantile suicide is an unusual occurrence. However, the number of suicides among children and adolescents till 14 years of age appears to be increasing in several countries. Rates are varying from 0 to 3.1/100000 between countries with an estimated 0.6/100000 global rate and a 2 : 1 male/female coefficient [34]. These rates rise towards adolescence due to a greater planning and more lethal suicide attempts, and together with a higher prevalence of mental disorders and substance abuse [35, 36].

Some studies observed the gender paradox among subjects aged 10–19 years. Adolescent women from 13 years of age show an abrupt increase of suicidal ideation, plans, and attempts [37]. The rates of suicidal ideation and attempts are consistently increased after puberty among females when compared to male adolescents [13, 38]. The highest rates of suicide attempts [39] or parasuicides [40] appear earlier in adolescent women compared to men, with a time gap of about 3 years [39]. In addition, teenage girls that committed suicide more often had previous attempts and conflicts with their parents and left a note than male groups [41, 42]. Suicidal behavior among female adolescents should be a worrying problem for institutions and researchers [43].

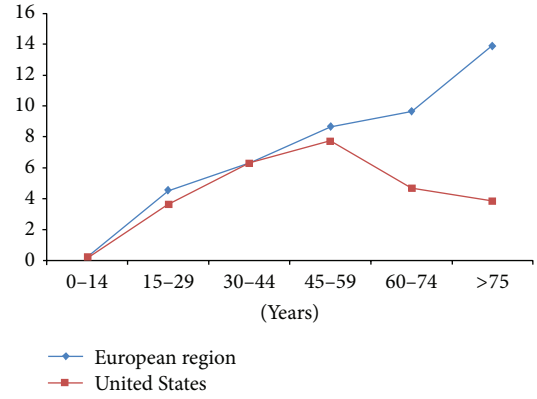

Figure 1: Evolution of female suicide rates in Europe and the United States 1999–2010 (Source: http://data.euro.who.int/hfamdb/, http://webappa.cdc.gov/sasweb/ncipc/mortrate10_us.html).

Suicide is the third leading cause of death for persons aged 10–14 years and 15–24 years, the second leading cause for persons aged 25–34 years in the US [2], and the second cause of mortality after accidental deaths in Europe [44]. According to a recent study on 14738 suicides committed in 15 European countries among youths aged 15–24 years, men had a 3.7-fold higher risk of completed suicide than women [3]. Some authors have suggested that this difference between male and female adolescents is due to methodological issues, such as an overrepresentation of male subjects in the group of suicides aged 15–19 years [45]. However, gender differences could be explained by greater levels of aggression, more frequent substance use disorders, and more lethal methods in males than females [35, 46]. This situation changes when considering Asian countries, for instance in Hong Kong the suicide rates (per 100000) among persons aged 15–19 were 5.1 for males and 5.2 for females [47]. Gunnell et al. [48] showed that although the suicide rate in England and Wales is still higher in men, the difference in recent years has decreased compared to women (1950–1998). Suicide is also the world leading cause of death in women aged 15–24 years, mainly in low-income and middle-income countries, according to Patton et al. [49]. In addition, suicides by hanging/suffocation may be augmenting among U.S. women aged 15–34 years [50] and 10–19 years [51]. Åsgård et al. [52] analyzed the causes of death in Sweden from 1952 to 1981, finding a tendency towards lower ages and higher female suicidal risk along this period.

Brent et al. [35] have compared several studies on psychological autopsies among adolescents with their own sample. They found that females used generally less lethal means, such as self-poisoning by overdose, with a more frequent prevalence of affective disorders and previous attempts. However, adolescent women who commit suicide may use

Table 1: Female suicide across the life cycle: main studies.

Authors	Population	Main results
	Childhood, adolescence, and youth women	
Biddle et al., [50]	England and Wales, 1968–2005. Men and women aged 15–34 years	Suicide rates stability over time. In the 21st century recording lowest rate
Grøholt et al., [41]	Norway, 1990–1992. All suicide in people under 20 years	Teenage girls suicide victims died mainly by hanging. They were more often affected by problems with parents, wrote farewell note, and had previous suicide attempts
Eaton et al., [37]	Youth Risk Behavior Surveillance System (YRBSS) USA, 2007. 1268 primary students	Adolescent women from 13 years of age show an abrupt increase of suicidal ideation, plans, and attempts
Gunnell et al., [48]	Mortality data England and Wales, 1950–1998	Suicide rates decreases in women aged over 45 years. Risk greater in women aged 25–34 years associated to participation in the workforce
Lewinsohn et al., [43]	USA (Western Oregon), 1987–1989. 1709 adolescents (aged 14–18)	Suicide attempts hazard rate in female adolescents greater than males adolescents. Adolescent suicidal behavior predicted suicide attempts during young adulthood for females
	Role of reproductive cycle and maternity	
Appleby, [61]	England and Wales, 1973–1984. Women aged 15–44 years committed suicide in the year after childbirth or during pregnancy	Women in the first year after childbirth or during pregnancy have a low-risk suicide despite their high rate of psychiatry morbidity women who committed suicide after childbirth most often did at the first month
Czeizel, [71]	Budapest, 1960–1993. 1044 pregnant women aged 14–44 years	Maximum number of suicide attempts in pregnant women occurs in the group from 18 to 20 years. Most unplanned pregnancies and main method used poisoning
Da silva et al., [65]	Brazil, 2006–2008. 1414 women pregnant treated in the public health system	There is greater suicidality in pregnant women who have depressive and anxiety symptoms
Gissler et al., [68]	Finland, 1987–1994. 1347 women aged 15–49 years that committed suicide	The risk of suicide was at its highest during the first two months after the end of pregnancy and mainly in the age group 35–39 years
Samandari et al., [85]	North Carolina surveillance and vital statistics data from 2004–2006. Women reproductive age, 14–44 years	Greater percentages of pregnant/postpartum suicide victims never married compared to no pregnant/no postpartum suicide victims
	Middle-aged women	
Burrows et al., [31]	Canada (Québec), 1990–2005. People 10 years and older	Suicide mortality in women increases in the time. Rate suicide is highest between 25 and 44 years (2002–2005)
Bramness et al., [87]	Norwegian, 1994–2007. 131362 people (69774 women) aged 39–44 years	More self-report mental health problems among females than males. Increased risk of suicide with higher self-report depressive and anxiety symptoms
Cutright et al., [88]	Suicide rates of married and not married females in 12 developed countries, 1960	The suicide rate is higher in not married females mainly age group 35–44 years. Being married is a protective factor.
Karch et al., [2]	United States, 2009. National Violent Death Reporting System (NVDRS). 15981 fatal incidents (60.6% suicides)	Females among ages 35 and 64 years accounted for 64.8% of suicides. Rates suicide for females peaked at 9.1 per 100,000 among those aged 45–54 years

Table 1: Continued.

Authors	Population	Main results
White and Holmes, [89]	Mortality database WHO, men and women aged 15–44 years across 44 countries	Suicide rate in women increases with age. Group 15–24 years (14.1), group 25–34 years (21.7), and group 35–44 years (23.8)
	Oldest women	
Erlangsen et al., [90]	Danish population, 1994–1998. People 50 years or above	During first year of widowhood the suicide risk increases in ages over 80 years. The highest rate of suicide is reached in the group 65–79 years and then declines over 80 years
Klein et al., [53]	Switzerland (Canton), 1995–2007. 3431 cases of suicide	Suicide risk increases with age. Women's group of the 50–89 years rates the highest. Main methods used poisoning, hanging, and firearm
Pridemore and Spivak, [27]	Mortality date Russian, 1965–1999	Suicide rates increased about 17% in the last three decades. Suicide rate in women increases with age reaching its peak over 80 years. Risk factor in females that reside alone
Wanta et al., [91]	Wisconsin's. USA, 2001–2006. People over 65 years	The suicide rates in women decrease with age. Protective factor is being married.
Zeppegno et al., [92]	Date on suicide in Italy (Novara and Verbania), 1990–2000. People 65 and older years	Suicide rates in women increase over 74 years. Greater risk of suicide in divorced, widowed, and single

increasingly violent methods such as shooting by firearms or hanging [41]. Klein et al. [53] found that the method most commonly used in the 10–19 years group was jumping form a height, while the 20–49 age group used other methods such as poisoning, hanging, strangulation, suffocation, or drowning. Other studies in western populations found that the most common suicidal methods in women aged 10–24 years were hanging/suffocation, drug poisoning, and jumping [3, 54]. Thus, if women used more lethal means the gender difference in suicide rates could be reduced [55]. However, the highest suicidal risk among female adolescents precede 2-3 years that of male adolescents, and by 19 years of age the risk is similar [43]. Saunders and Hawton [56] suggested that the initiation of menarche is the moment when gender differences in the ratios of affective disorders and suicide behavior move apart.

3. Role of Reproductive Cycle and Maternity

Consistent evidence of an association between menstrual phase and completed suicide has not been found [56]. Non-fatal suicidal behavior and suicidal ideation seem to be more frequent when estrogen levels are lowest during the menstrual cycle, in particular the late luteal and follicular phases [56–58]. Besides, suicide attempters have shown higher prevalence of premenstrual symptoms and premenstrual dysphoric disorder than the general population [57].

Several studies seem to confirm that maternity plays a more important role than marriage in the decreased risk for completed suicide among middle-aged women when compared to men. Actually, mothers having more children show an enhanced protection [59]. Being pregnant [33] and having a child of less than two years of age [60] have also been associated with lower suicidal risk. Moreover, as the age of the youngest child diminishes, suicide risk is reduced to a greater extent [59]. Women living with a partner and children that changed to living with only a partner were overrepresented among parasuicidal women in the WHO study [30].

Different authors support the idea that the birth of a child is a protective factor against fatal and non-fatal self-harm, especially in the first year after delivery [59, 61, 62]. However, this protective function differs in pregnant women with psychiatric disorders. Between 10–25% of pregnant and postpartum women experience depressive disorders [63, 64] or anxiety disorders [65, 66]. These women are more likely to complete suicide, especially within the two first months of the postpartum [67, 68]. In addition, pregnant teens represent a high risk group, with an estimated 16–44% prevalence rate of depression [69, 70]. Teen mothers are more likely to present suicidal thoughts, or attempts especially if it is the first pregnancy or if the pregnancy is unplanned [71–74].

Suicide is the fourth cause of maternal deaths in the world [75] and the leading cause of death in first-year postpartum women in the United Kingdom [76, 77]. The risk of suicide was calculated to be 70 times higher in women with psychiatric disorders during the first year after childbirth compared to the general female population [78]. In the same vein, Gissler et al. [68] reported a suicide rate of 11 per 100.000 in a large sample of Finnish postpartum women. In this study, suicide rates associated with childbirth were close to half of those among non-pregnant women aged 15–49 years, but adolescent mothers were three times more likely to commit suicide than other females in their age group.

Suicidal behavior and suicide rates may be increased after an abortion, particularly when induced [79, 80]. In fact, induced abortion may increase suicidal risk in relation with the impact of the decision itself, because prior to the abortion no difference in suicidal risk was found with women completing their pregnancy [81]. However, findings on mental health consequences of abortion have been contested, and the recent literature review limited the validity of studies to date [82].

Miscarriage has also been linked to an increased maternal suicide risk [68, 81]. Other factors associated with an increased risk of suicide in pregnant women and after childbirth were single, unmarried, or divorced marital status, low income, having thoughts about abortion, unemployment, occupational instability, and poor social support [65, 83–85]. Finally, another dimension associated with female suicide but less studied is infertility. Kjaer et al. [86] found in a sample of 51221 Danish women, that those who succeeded in the treatment of infertility had half the risk of suicide than the unsuccessful ones.

4. Suicide in Middle-Aged Women, Marriage, and Divorce

In the US, female suicide is concentrated in the 35–64 years age group (64.8%), with a 9.1/100000 peak between those aged 45–54 years [2]. Similar results have been reported for England and Wales [25]. Societal changes lead many women in this age group to become economically active, maybe increasing the risk of suicide among them [48, 93] as well as the mental health problems [87]. From 50 years of age, the suicide rates among women tend to diminish progressively [4, 94] till old age, when rates start increasing again (Figure 1). White and Holmes [89] found that suicide rate in women increases with age reaching its peak at 35–44 years. Yet, depression and suicide ideation have been associated with the perimenopause phase in women when compared to premenopausal and postmenopausal [95].

According to the exist literature, married women are less prone to suicide than single, divorced, and widowed women [88]. Never-married, divorced, or widowed women conduct most suicides (60.4%) in the US [2]. Cutright et al. [88] analyzed retrospective data from 12 developed countries to explain the differences in suicide between married and non-married women. They concluded that the compatibility of marital status with the corresponding age group was the best explanation of these differences, but the results were limited by not considering the influence of maternity. Divorce affects in a singular way the risk of suicide among women. They present lower suicide rates after divorce than men, but the gender protection seems to decrease with advancing age [96].

5. Suicidal Behavior among the Oldest Women: Death of Partner or Child

Advanced age seems to increase the divergence between sexes in the rate of completed suicide among the elder [22]. Whereas suicide attempt rates diminish with age independently of gender [97], the rates of completed suicide augment

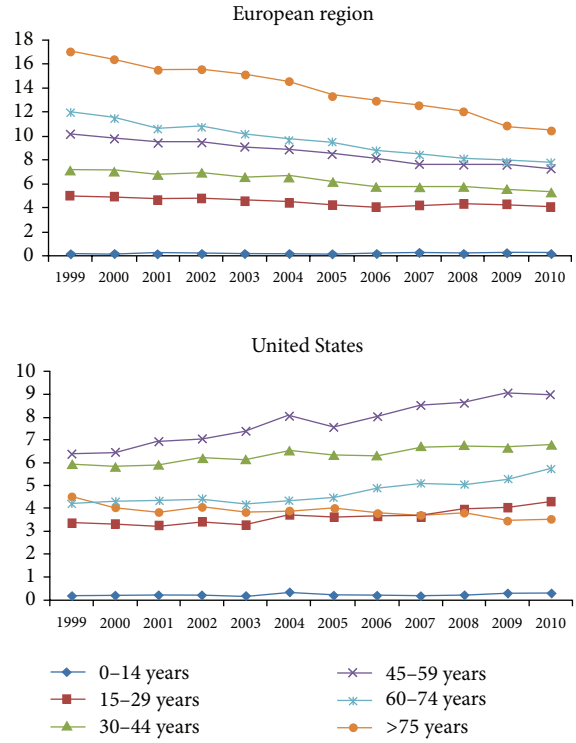

Figure 2: Comparison of longitudinal trends in female suicide rates between Europe and the United States 1999–2010. Source: http://data.euro.who.int/hfamdb/, http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html.

with age [92]. This increase is particularly prominent among men [53] reaching 6–12 times higher rates than women in western countries [98]. This important difference has been attributed to a better planning, fewer warnings of suicidal intent, and the use of more lethal methods, mainly firearms and hanging/suffocation [91, 98–100]. However, the male to female suicide ratio did not change in Eastern Europe or South America in the group aged over 65 years [101], and it even decreased in the US [6].

Female suicide rates in western countries increase with advancing age until they reach a peak around menopause. However, the evolution of suicide rates among older women may vary greatly depending on the country. In Europe they appear to continue their growth at a lower pace but sustainable increased in the oldest age groups (Figure 1) [53, 102], and similar results have been reported in Russia [27], Korea [103], and China [104]. The Centers for Disease Control and Prevention (CDC) report a declining trend in the US, 5.8 for those aged 60–69 years, 4.2 for those aged 70–79 years, and 2.7 for those aged over 80 years [2]. The largest differences between Europe and the US with regards to female suicide rates are seen in this group of age (Figure 1), although longitudinal trends show an approximation in the rates of both regions in recent years (Figure 2).

Widowed, divorced, and never married old women are at greater risk of completing suicide [91, 92]. The death of the partner occupies a prominent place to explain the high rates

of suicide they present. Following the work by Erlangsen et al. [90] old persons present a 15-fold higher risk of suicide after the loss of their partner than middle-aged persons. Though women are also affected, suicide rates and time needed for recovery are particularly increased among men. In an interesting study by Agerbo [105], conjugal bereavement was found to raise spousal suicide risk, and especially when death had been the result of a suicide. He also found that suicide risk when other causes produced the death of the partner was three-fold higher among men than among their feminine counterpart. Some studies found that the main methods used to completed suicide by this age group are poisoning and firearms [53, 98].

Parental suicide risk is highly influenced by the loss of a child [59]. Risk is enhanced in the first month after the death, with younger age of the child or if result of a suicide [59]. The increased risk of suicide is independent of gender, but having another child constitutes a protective factor for the mother [105].

6. Conclusions

Suicidal behavior presents important differences between men and women. Men are more prone to completed suicide but women have more frequent suicide attempts. It is nowadays accepted that this fact is independent of methodological issues. Several hypotheses have been proposed to explain this difference; some of them underline biological aspects, while others focus mainly on the feminine role and psychosocial aspects of gender. In any case, gender is one of the most frequently replicated predictors of suicide, and a detailed analysis of gender differences in suicidal behavior is important to establish preventive measures and priorities. Besides, suicide risk is not regular along the female lifecycle and the literature revision revealed large cross-national differences. Intervention on suicide must therefore be adapted specifically to the different populations. Studies analyzing the evolution of suicidal behavior in women and associated factors in the most significant milestones of their life history are needed.

The evolution of female suicide rates in Europe and the United States diverges in the 1999–2010 period. Suicide rates increase in the old age among European women, while an opposite trend for that age period is seen in the U.S. (Figure 1). Consequently, the longitudinal trends show the highest suicide rates in European women over 75 years, while the highest rates in the US correspond to women of 45–59 years of age (Figure 2). These differences demonstrate the importance of cultural and sociodemographic variables in the analysis and should be considered for the development and implementation of prevention programs.

Conflict of Interests

The authors declares no conflict of interests.

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Código 100: un estudio sobre la conducta suicida en lugares públicos

Code 100: an study on suicidal behavior in public places

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Abstract

Español

Los servicios de urgencias de nuestro país reciben diariamente una gran cantidad de pacientes que han realizado un intento de suicidio o refieren ideación suicida. Desafortunadamente, estos pacientes son a menudo reticentes a mantener un seguimiento en salud mental. En este estudio describimos un programa pionero para favorecer la evaluación y el tratamiento de los pacientes suicidas y en particular de aquellos que son atendidos por los servicios de emergencia fuera de sus domicilios. Resumiremos la aplicación del programa y compararemos los resultados de un seguimiento específico entre los pacientes suicidas atendidos por los equipos de emergencia en lugares públicos frente al resto de pacientes con riesgo suicida evaluados en el servicio de urgencias de un hospital terciario.

English

The emergency departments in our country receive daily a large number of patients that have thought about or attempted suicide. Unfortunately, these patients are very often reluctant to keep a regular follow-up in mental health services. In this study we describe an original program to encourage the assessment and treatment of suicidal patients, particularly when they receive medical attention in public places. We will summarize the application of the program and compare the results of the intensive follow-up between two groups of patients: suicidal patients assessed by emergency services in public places and all other suicidal patients assessed in the emergency department of a tertiary hospital.

Palabras clave: intentos de suicidio, seguimiento, crisis psicosocial, urgencias.

Keywords: suicide attempts, follow-up, psychosocial crisis, emergency.

Introducción

Desde el año 2008 en España el suicidio es la primera causa de muerte no natural y una de las principales causas de muerte en jóvenes adultos (1). No existen estimaciones fiables sobre el número total de intentos de suicidio en España, aunque un estudio reciente señala una tasa bruta anual de 255 intentos de suicidio atendidos en centros de salud por cada 100000 habitantes en la Comunidad de Madrid (2). Si trasladamos estas cifras directamente a la población nacional suponen casi 120000 intentos de suicidio al año, sin incluir aquellos casos que no acuden a los servicios sanitarios ni la posible infraestimación que en países de nuestro entorno ha sido calculada en hasta un 20% (3). La prevalencia-vida de intentos de suicidio en España se sitúa en el 1.5%, siendo el riesgo de conductas suicidas más elevado en mujeres, jóvenes y personas con bajo nivel educativo (4). La conducta suicida, de forma directa o indirecta, origina disfunción social, utilización de recursos sanitarios y discapacidad, acarreando enormes costes sociales y económicos (5). Es importante recordar que, aunque los intentos de suicidio previos son el mejor predictor de repetición y suicidio consumado (6) , una adecuada prevención y tratamiento puede reducir el riesgo (7).

A nivel de la prevención secundaria de la conducta suicida, las intervenciones sobre poblaciones de riesgo han obtenido resultados variables. En general, las estrategias de soporte sin intervención como el envío de cartas de crisis, postales personalizadas o las llamadas telefónicas tienen un efecto limitado sobre la reducción del riesgo de nuevas conductas suicidas (8-10), aunque hay excepciones (11) . Otros métodos basados en intervenciones intensivas centradas en el paciente o con disponibilidad de estructuras de crisis han sido más efectivas (12-16). De hecho, una revisión reciente de las tasas de suicidio en el Reino Unido entre 1997 y 2006 ha encontrado la mayor disminución de riesgo en aquellos centros que habían creado unidades de crisis permanentemente disponibles (17) . Los servicios de urgencia son con frecuencia la puerta de entrada al sistema sanitario de los pacientes suicidas (18) y, en ese sentido, representan una oportunidad única para implementar programas de intervención. Hasta el momento estas intervenciones se

han basado principalmente en el establecimiento de un seguimiento intensivo tras el alta con una duración de 12 a 18 meses (15, 19). La identificación temprana de pacientes con alto riesgo suicida permite reducir la repetición de intentos de suicidio y la frecuencia de suicidios consumados (11, 20-22).

En España pocos programas de prevención de suicidio han sido evaluados. Tejedor y cols. iniciaron en el año 2005 un programa de monitorización de pacientes en situación de riesgo. En comparación con un grupo control encontraron que los pacientes incluidos en el programa consultaban más a menudo por ideación autolítica, pero realizaban menos intentos de suicidio y menos ingresos hospitalarios (23). Recientemente, Cebria et al. (11) han descrito la implantación de un programa de seguimiento telefónico para pacientes suicidas que ha reducido la tasa de recidivas en un 8% con respecto a la población general y también con respecto a los datos del centro en el año previo.

En este artículo describimos la puesta en marcha de un programa de colaboración entre el servicio de Psiquiatría de la Fundación Jiménez Díaz (FJD) y el SAMUR-Protección Civil (en adelante: SAMUR) para la prevención de la conducta suicida en la Comunidad de Madrid (Código 100). Este programa privilegia la evaluación del riesgo suicida tras situaciones de emergencia en lugares públicos para facilitar el tratamiento y minimizar el abandono.

Metodología

Pacientes

Existen dos vías de acceso al programa del Código 100 (Figura 1). Por un lado, durante cualquier intervención del SAMUR, que actúa únicamente en vía pública y locales públicos, por ideación o conducta suicida. El equipo del SAMUR utiliza el módulo de suicidio de la Entrevista Neuropsiquiátrica Internacional (MINI) y la escala SAD PERSONS (24) para evaluar el riesgo suicida en el lugar de la emergencia, de acuerdo con el "Procedimiento de urgencias psiquiátricas" (www.madrid.es/samur). Tras la evaluación, los pacientes que lo requieren son trasladados al Servicio de Urgencias de la FJD. Antes del traslado, se realiza un preaviso por vía telefónica a los responsables de las urgencias psiquiátricas informando acerca de la conducta suicida y la situación clínica del paciente. En segundo lugar, cualquier paciente que haya realizado un intento de suicidio y sea

evaluado en el Servicio de Urgencias de la FJD puede también incorporarse al programa en esta fase. Estos pacientes pueden acceder a urgencias a demanda propia o tras una intervención sanitaria en sus domicilios.

Evaluación del riesgo suicida en urgencias

Criterios de inclusión: 1) ser mayor de 18 años, 2) presentar ideación o conducta suicida en la evaluación inicial y 3) aceptar participar, con la firma del consentimiento informado. Una vez en el servicio de urgencias, los sujetos que ingresan en el programa realizan una evaluación protocolizada, que incluye la recogida de: 1) variables sociodemográficas, 2) características de la conducta suicida, 3) antecedentes personales y familiares de enfermedad mental y conducta suicida, 4) un cuestionario de experiencias vitales (Brugha) (25), 5) la Escala de Ideación Suicida de Beck (26) , y 6) la versión española de la Escala de Impulsividad de Barratt (27). Para la evaluación diagnóstica en Eje I se aplica la MINI Entrevista Neuropsiquiátrica Internacional (28). Para valorar patología en Eje II se emplea la versión española del Examen Internacional de Trastornos de la Personalidad (IPDE), versión DSM-IV (29). Todos los cuestionarios están disponibles en entorno web y pueden ser aplicados a través de internet (www.assessingsuicide.com). Este procedimiento ha sido aprobado por el comité de ética de la FJD.

Procedimiento

Apoyándose en la evaluación de riesgo, se toma la decisión clínica de ingreso, alta o traslado según el procedimiento habitual. En cualquier caso, tras el alta hospitalaria se ofrece la posibilidad de una primera consulta ambulatoria en el plazo de 72 horas en el Centro de Salud Mental de Moncloa. Si el paciente ya estaba en seguimiento o prefiere ser atendido en otro centro se mantiene únicamente el contacto telefónico para asegurar que la atención se realiza y transferir información sobre la situación clínica del paciente.

La atención ambulatoria especializada tiene dos funciones primordiales: 1) asegurar la continuidad de cuidados, y 2) garantizar un tratamiento adecuado y precoz de la enfermedad mental. El psiquiatra responsable coordina el plan de tratamiento con otros dispositivos (psicología clínica, enfermería, trabajo social) y ajusta la frecuencia de las sesiones en función del estado clínico del paciente. Asimismo se establece una terapia de grupo semanal orientada a mejorar el control conductual en un

subgrupo de pacientes con rasgos impulsivos. El programa de atención ambulatoria intensiva o próxima se prolonga entre seis meses y un año. Tras este periodo, se asegura la transmisión al circuito habitual de salud mental.

Seguimiento telefónico

Simultáneamente se realiza un seguimiento telefónico de los pacientes que han sido atendidos dentro del programa, independientemente de la atención ambulatoria. Este seguimiento está orientado a la detección de nuevas conductas suicidas y se realiza mediante un protocolo de contacto a las 72 horas, al mes, a los seis meses y al año de haber presentado ideación o conducta suicida. El personal administrativo encargado de contactar con los pacientes ha sido entrenado para recoger información acerca de las conductas suicidas y el seguimiento en salud mental, y para fomentar la continuidad de cuidados de los pacientes.

Análisis estadístico

Comparamos los pacientes que ingresaron en el programa a través de una atención del SAMUR con aquellos que ingresaron tras una demanda a nivel hospitalario mediante tests Chi2 para las variables categóricas y análisis de la varianza para las variables cuantitativas. El nivel de significación se estableció en $p<0.05$. Todos los análisis fueron realizados con el programa estadístico: Social Package for Statistical Sciences v20.0.

Resultados

Descripción de la muestra

Durante los primeros 10 meses, 110 pacientes fueron incorporados al programa Código 100 tras una intervención del SAMUR (grupo SAMUR). Otros 83 pacientes fueron derivados al programa desde distintas unidades de la FJD (fundamentalmente urgencias). Del total de 193 pacientes, cuatro rehusaron participar y no se continúo el seguimiento. Los 189 pacientes restantes tenían 40.7 años de media en el momento de la valoración (DE=14.2) y eran mayoritariamente varones (103/189; 54.5%). Un total de 115 pacientes completaron el protocolo de evaluación. De estos, 35 pacientes realizaron al menos un nuevo intento de suicidio en los siguientes seis meses (18.5%), muchos de ellos en los primeros tres días (11/35) o en el primer mes (23/35) tras la evaluación. Cinco pacientes fallecieron a lo largo del seguimiento, dos de ellos a consecuencia de un intento de suicidio, los otros tres por causas no

confirmadas (información no disponible en el certificado de defunción).

Del total de la muestra, 96 pacientes (83.5%) no presentaban un tratamiento (psicofármacos o terapia) en el momento de ingresar al programa. Tras la entrevista de evaluación, 87 pacientes no quisieron continuar en el programa o no pudieron ser contactados (87/189; 46%).

Comparación entre pacientes suicidas según origen de la atención

La tabla 1 proporciona información detallada respecto a las variables demográficas analizadas. Se encontró una asociación significativa entre un nivel de ingresos mensual menor a 500 euros y el lugar de atención (χ^2=0.76; gl=1; p= 0.05). El grupo SAMUR informó de menores ingresos mensuales. No se encontraron diferencias significativas en relación al lugar de atención con respecto al sexo, estado civil, situación laboral o nivel educacional.

Respecto a las variables clínicas, los pacientes del grupo SAMUR rehusaron con mayor frecuencia el seguimiento en salud mental o no pudieron ser contactados (χ^2= 13.54; gl=1; p= 0.01) y mostraron una tendencia estadística al diagnóstico de trastornos por uso de sustancias (χ^2= 3.37; gl=1; p= 0.066) con respecto al resto de pacientes. El grupo SAMUR también mostró puntuaciones significativamente más altas de la escala SAD PERSONS, que mide el riesgo de suicidio (χ^2= 5.480; gl=1; p= 0.019). Sin llegar a ser significativamente diferente, este grupo presentaba puntuaciones más altas en la subescala RRRS Rescate (F= 3.711; gl=1; p= 0.057) y una mayor incidencia de nuevos intentos de suicidio durante el primer mes de seguimiento (F= 3.473; gl=1; p= 0.062) que el resto de los pacientes. No hubo diferencias significativas entre los lugares de atención con respecto a ningún otro diagnóstico ni característica clínica.

Al considerar los trastornos de personalidad, los pacientes del grupo SAMUR presentaban con más frecuencia antecedentes de diagnósticos en eje II (χ^2= 4.327; gl=1; p= 0.038). Asimismo, el grupo SAMUR mostró una tendencia estadísitca no significativa a presentar niveles más bajos de autocontrol de acuerdo a la escala BIS (F= 3.164; gl=1; p= 0.078). Sin embargo no hubo más diferencias entre los grupos con respecto a otras subescalas del BIS o trastornos de personalidad en el momento de la

evaluación de acuerdo con el IPDE (datos no incluidos).

Conclusiones

En este estudio describimos la implantación de un programa de evaluación y seguimiento para pacientes suicidas a partir del servicio de urgencias de un hospital terciario. Una de las particularidades de este programa es la inclusión de pacientes atendidos por el SAMUR en lugares públicos, una población que podría ser especialmente vulnerable y que no ha sido evaluada en estudios previos.

De hecho, nuestros resultados confirman un incremento del riesgo suicida en el grupo de pacientes atendidos por el SAMUR. Los individuos de este grupo presentaron un mayor riesgo de suicidio según la escala SAD PERSONS y una menor adherencia al seguimiento que el resto de pacientes suicidas. Además, mostraron tendencias estadísticas no significativas a tomar mayores precauciones para prevenir el rescate (subescala rescate de la RRRS) y a repetir un nuevo intento de suicidio en el mes posterior a la evaluación. Los antecedentes de trastornos de personalidad, también asociados con el grupo SAMUR, podrían aumentar el riesgo de conductas suicidas (30, 31) y la severidad del intento de suicidio (32-34). Por otro lado, las intervenciones por riesgo suicida en lugares públicos detectaron con frecuencia a personas de nivel socioeconómico bajo, que podrían estar en situación de exclusión y vulnerabilidad social. Sin embargo, no encontramos diferencias psicopatológicas entre estos pacientes y el resto de la muestra, salvo una tendencia al abuso/dependencia de sustancias no alcohólicas. Conjuntamente, la intervención en vía pública, la menor adherencia al seguimiento y el bajo nivel socioeconómico sugieren una situación de crisis psicosocial. El aumento del riesgo de suicidio se ha relacionado con factores tales como el aislamiento social, el desempleo, el menor nivel educativo o la pobreza (35-38).

El programa consideró un periodo de seguimiento de seis meses que corresponde con el período de mayor riesgo de repetición del intento de suicidio según diversos estudios (39-42). Del total de la muestra (n=115) analizada, 74 pacientes (64.3%) respondieron al seguimiento de seis meses. De ellos, 2 personas (1.7%) consumaron el suicidio. Según estos datos la respuesta al seguimiento presenta

resultados comparables a los reportados en otros programas que varían entre el 25% y el 70% (13, 23, 43, 44). Sin embargo, la tasa de suicidios consumados fue ligeramente superior a la descrita en otros estudios metodológicamente similares, que oscilaba entre 0.9 y 1.3% (23, 43, 45). La particular vulnerabilidad de nuestra muestra podría explicar ese ligero aumento.

Nuestro estudio presenta limitaciones asociadas al tamaño muestral lo que sugiere que algunas de las tendencias estadísticas que encontramos podrían confirmarse al aumentar el número de participantes. Además, la no participación de muchos pacientes en el seguimiento ha impedido verificar el impacto de las intervenciones realizadas. Algunos estudios previos ya han señalado que los pacientes que aparentan ser más vulnerables durante la atención en urgencias por un intento de suicidio abandonan el tratamiento con frecuencia (11, 46-48). Por otro lado entre las fortalezas del estudio cabe destacar la evaluación sistemática de los pacientes en el contexto de un programa clínico de reducción de riesgo. La valoración del riesgo suicida es una parte fundamental de las urgencias psiquiátricas, pero a menudo se realiza de forma incompleta de acuerdo con los informes clínicos (49) . Conviene recordar las razones que apoyan el uso de escalas para la evaluación del suicidio: 1) sirven como referencia y aumentan la exhaustividad de la evaluación (50), especialmente entre los especialistas en formación (51); 2) aumentan la capacidad de predicción de nuevas conductas suicidas (52); y 3) aportan un soporte legal a la evaluación del riesgo.

Los programas de prevención son eficaces (7), pero la optimización de los recursos exige que estos programas se enfoquen sobre subpoblaciones especialmente vulnerables. Aunque nuevos estudios son necesarios para confirmar nuestros resultados, el origen de la atención puede permitir identificar una población de alto riesgo de forma precoz.

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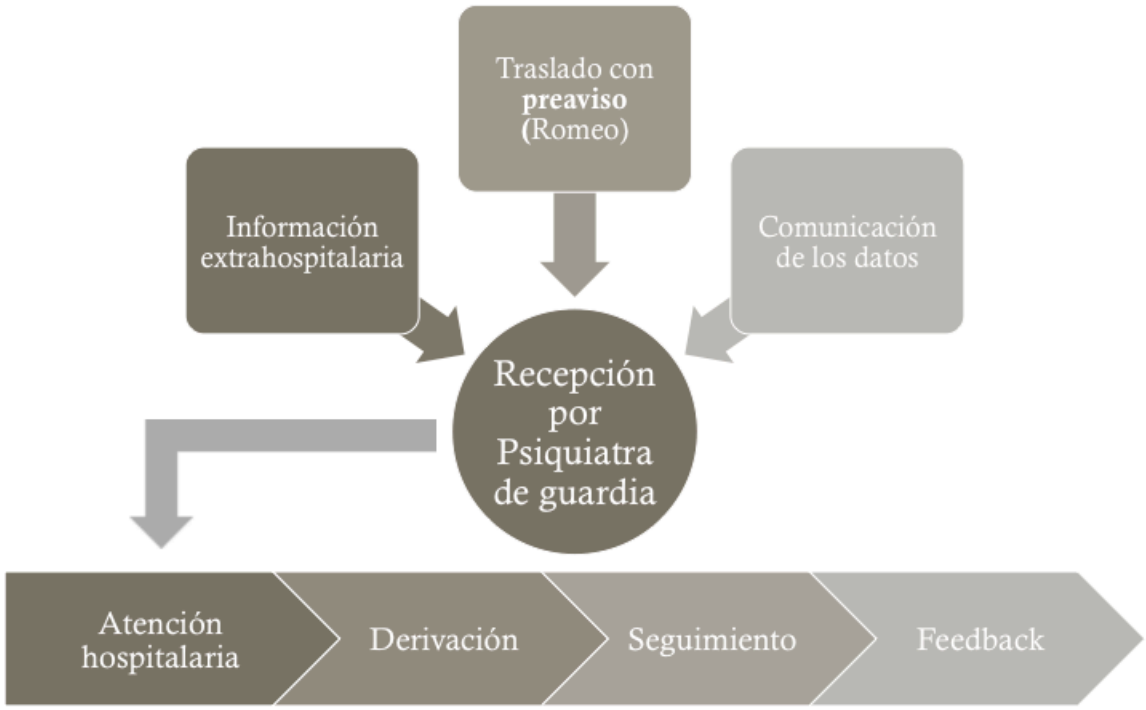
Tabla 1. Comparación de las características clínicas y demográficas de los pacientes suicidas según el origen de la atención (p<0.1 indicado en negrita).

Lugar de atención	**SAMUR n (%) o Media±D**	**Otros n (%) o Media±DE**	**Estadístico**		
			χ^2/F	**gl**	**p**
Factores demográficos					
Sexo (mujeres)	22 (45.8)	35 (52.2)	0.46	1	.50
Edad	38.1±13.0	41.0±14.1	1.29	1	.26
Ingresos (<500 euros/mes)	20 (46.5)	14 (21.2)	0.77	1	**.005**
Estado civil (en pareja)	37 (77.1)	47 (70.1)	0.68	1	.41
Situación laboral (inactivo)	32 (66.7)	39 (59.1)	0.68	1	.41
Nivel educativo (no superior a secundaria)	27 (56.2)	27 (41.5)	4.39	2	.11
Características clínicas					
Sin tratamiento actual	37 (77.1)	59 (88.1)	2.44	1	.12
Seguimiento	24 (53.3)	50 (86.2)	13.54	1	**.001**
Diagnósticos (MINI)					
Episodio depresivo mayor	24 (51.1)	34 (52.3)	0.02	1	.89
Trastorno distímico	8 (17.0)	14 (21.5)	0.35	1	.55
Trastorno de ansiedad	14 (29.8)	19 (29.2)	0.00	1	.95
Trastorno bipolar	3 (6.4)	9 (13.8)	1.59	1	.21
Trastorno psicótico	6 (12.8)	4 (6.2)	1.47	1	.23
Uso de alcohol actual	10 (21.3)	14 (21.5)	0.00	1	.97
Uso de sustancias actual	8 (17.0)	4 (6.2)	3.37	1	**.066**
Caraterísticas de la conducta suicida					
Método violento	10 (20.8)	8 (11.9)	1.68	1	.20
Repetición					
72 horas	2 (4.4)	3 (5.7)	0.07	1	.78
1 mes	5 (11.9)	1 (2.1)	3.47	1	**.062**
6 meses	4 (13.3)	3 (8.1)	1.10	2	.58
SAD Persons	17 (35.4)	11 (16.4)	5.48	1	**.019**
RRRS rescate	11.5±2.5	12.5±2.0	3.71	1	.057
RRRS riesgo	6.1±1.2	5.7±1.2	1.73	1	.19
SSI Total	13.2±8.9	13.2±8.5	0.00	1	.99
SIS Total	10.2±6.0	9.3±6.6	0.36	1	.55

RRRS: Escala de riesgo-rescate de Weisman-Worden; SSI: Escala de ideación suicida de Beck; SIS: Escala de intencionalidad suicida de Beck; MINI: Entrevista Neuropsiquiátrica Internacional.

Figura 1. Esquema de actuación del programa código 100. Romeo: Psicólogo de Guardia del SAMUR.



9. Conclusiones

1.Existe la necesidad de identificar y diferenciar sub-poblaciones en riesgo de realizar una conducta suicida. Definir el perfil clínico específico de grupos de pacientes puede permitir elaborar herramientas predictivas y de pronóstico para reducir el riesgo de nuevas conductas suicidas.

2.Hay una gran variabilidad en los criterios usados para definir a los repetidores de intentos de suicidio. Una parte importante de las publicaciones utilizan un índice para el seguimiento que no distingue adecuadamente entre los pacientes que han realizado un único intento de suicidio a lo largo de su vida y los que han realizado más de uno (repetidores). Esta variabilidad de la literatura hace difícil determinar las características específicas asociadas con la repetición de intentos de suicidio.

3.En la mayoría de los estudios, la repetición de intentos de suicidio se asocia a un mayor riesgo de trastornos mentales, principalmente trastornos afectivos, trastornos de ansiedad y abuso de sustancias. Además, los repetidores presentan habitualmente una mayor comorbilidad psiquiátrica.

4.La repetición de intentos de suicidio se asocia también de acuerdo a la literatura con variables psicosociales como un peor funcionamiento social, la historia familiar de conducta suicida y enfermedad mental, las experiencias traumáticas en la infancia (abuso emocional, físico y sexual) y mayores niveles de desesperanza.

5.Existen potenciales beneficios de identificar las características clínicas y psicosociales que diferencian a los repetidores de los pacientes que han realizado un único intento de suicidio. Por un lado, mejorar el diagnóstico y las estrategias de prevención de la conducta suicida. Por otro lado, lograr disminuir la carga emocional de los pacientes y sus familias facilitando orientaciones más específicas. Finalmente, reducir los costos asociados a la utilización de los servicios de atención sanitaria.

6.La tasa de ideación e intentos de suicidio se incrementa a partir de la pubertad en las mujeres adolescentes. El aumento del riesgo suicida parece estar asociado a la menarquia.

7.La conducta suicida en el sexo femenino se asocia con factores de riesgo y protección específicos. En mujeres de edad media y reproductiva, la maternidad y el matrimonio o vida en pareja son factores de protección frente a los intentos de suicidio y el suicidio consumado. Sin embargo, algunos factores de riesgo de conducta suicida específicos de la mujer son: presentar menores niveles de estrógenos (últimas fases lútea y folicular), sufrir una depresión postparto y haber practicado un aborto.

8.La revisión de la literatura muestra que las tasas de suicidio y conducta suicida en mujeres varían en función del grupo etario pero también del contexto cultural y las condiciones de cada país. Al comparar EEUU y Europa se observan tasas similares hasta los 45-59 años. Sin embargo, las mujeres norteamericanas alcanzan su tasa máxima de suicidio pocos años después mientras que las mujeres europeas lo hacen a partir de los 75 años.

9.Al estudiar una población de pacientes con riesgo suicida atendidos en la vía pública encontramos que sus características exigen una evaluación sistemática y un seguimiento intensivo para poder desarrollar estrategias de intervención diferenciadas.

10.Al comparar pacientes con riesgo suicida atendidos por los servicios de emergencia fuera de sus domicilios con otros pacientes suicidas evaluados en el servicio de urgencias de un hospital terciario encontramos que los primeros presentan una mayor severidad de sus intentos suicidas y antecedentes más frecuentes de trastornos de personalidad.

11.Nuestros resultados confirman un incremento del riesgo suicida y una menor adherencia al seguimiento del grupo de pacientes atendidos en la vía pública. El menor nivel socioeconómico de estos pacientes podría estar asociado a una situación de mayor vulnerabilidad y exclusión social.

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